NDSD

Is my water safe?

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

Do I need to take special precautions?

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).

Where does my water come from?

The source of your drinking water is surface water purchased from the City of Suffolk. The water receives substantial treatment, including filtration, electrodialysis and chloramination.

Source water assessment and its availability

VDH conducted a Source Water Assessment of the Suffolk Waterworks in 2001. The assessment report consists of maps showing the Source Water Assessment area, an inventory of known Land Use Activities utilized at Land Use Activity sites in Zone 1 and documentation of any known contamination within the last five years, Susceptibility Explanation Chart, and Definitions of Key Terms. The report is available by contacting your waterworks system owner/operator at the phone number or address included in this report.

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). 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, that 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; and radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities. 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.

How can I get involved?

If you have questions about this report, want additional information about any aspect of your drinking water, or want to know how to participate in decisions that may affect the quality of your drinking water, please contact Isle of Wight Public Utilities at (757) 365-6319. Public participation is also welcomed at monthly Board of Supervisors meetings on the 3rd Thursday of each month.

Description of Water Treatment Process

Your water is treated by filtration and disinfection. Filtration removes particles suspended in the source water. Particles typically include clays and silts, natural organic matter, iron and manganese, and microorganisms. Your water is also treated by disinfection. Disinfection involves the addition of chlorine or other disinfectants to kill bacteria and other microorganisms (viruses, cysts, etc.) that may be in the water. Disinfection is considered to be one of the major public health advances of the 20th century.

Water Conservation Tips

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference - try one today and soon it will become second nature.

- Take short showers - a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- Visit www.epa.gov/watersense for more information.

Cross Connection Control Survey

The purpose of this survey is to determine whether a cross-connection may exist at your home or business. A cross connection is an unprotected or improper connection to a public water distribution system that may cause contamination or pollution to enter the system. We are responsible for enforcing cross-connection control regulations and insuring that no contaminants can, under any flow conditions, enter the distribution system. If you have any of the devices listed below please contact us so that we can discuss the issue, and if needed, survey your connection and assist you in isolating it if that is necessary.

- Boiler/ Radiant heater (water heaters not included)
- Underground lawn sprinkler system
- Pool or hot tub (whirlpool tubs not included)
- Additional source(s) of water on the property
- Decorative pond
- Watering trough

Source Water Protection Tips

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides - they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use EPA's Adopt Your Watershed to locate groups in your community, or visit the Watershed Information Network's How to Start a Watershed Team.
- Organize a storm drain stenciling project with your local government or water supplier. Stencil a message next to the street drain reminding people "Dump No Waste - Drains to River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

Other Information

Sodium: There is presently no established standard for sodium in drinking water. Water containing more than 270 mg/L of sodium should not be used as drinking water by those persons whose physician has placed them on moderately restricted sodium diets. Water containing more than 20 mg/L should not be used as drinking water by those persons whose physician has placed them on severely restricted sodium diets. For informational purposes only, we wish to point out that the analysis of a 2023 sample indicates that our water system has a sodium content of 54.7 mg/L.

Additional Information for 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. Northern Development Service District 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.

Water Quality Data Table

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detect In Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
Disinfectants & Disinfection By-Products								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
Chlorine (as Cl2) (ppm)	4	4	3.09	3.09	3.18	2023	No	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	NA	60	12.35	5.3	12.4	2023	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppb)	NA	80	16.85	7.4	16.9	2023	No	By-product of drinking water disinfection

Contaminants	MCLG	AL	Your Water	Sample Date	# Samples Exceeding AL	Exceeds AL	Typical Source
Inorganic Contaminants							
Copper - action level at consumer taps (ppm)	1.3	1.3	.22	2022	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead - action level at consumer taps (ppb)	0	15	0	2022	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

Unit Descriptions	
Term	**Definition**
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.

Important Drinking Water Definitions	
Term	**Definition**
MCLG	MCLG: Maximum Contaminant Level Goal: 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.
MCL	MCL: Maximum Contaminant Level: 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.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection level goal. 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.
MRDL	MRDL: Maximum residual disinfectant level. 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.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

For more information please contact:

Contact Name: Jonathan Gwaltney
Address: P. O. Box 108
Isle of Wight, VA 23397
Phone: 757-365-6319

CITY OF SUFFOLK

REGULATED CONTAMINANTS

These contaminants have set limits and cannot exceed the maximum contaminant level (MCL).

INORGANIC SUBSTANCES

Contaminant	Date Tested	Unit	MCL	MCLG	Detected Level	Range	Typical Sources	Violation
Barium	2023	ppm	2	0	0.01	N/A	Erosion of natural deposits.	**NO**
Fluoride	2023	ppm	4.0	4.0	0.96	0.85 - 1.28	Erosion of natural deposits; Water additive which promotes strong teeth.	**NO**
Chloramines	2023	ppm	MRDL	MRDLG	Average Level Detected	0.06 - 4.56	Water additive used to control microbes.	**NO**
			4.0	4.0	3.08			

TURBIDITY

Contaminant	Date Tested	Unit	MCL	MCLG	Highest Level NTUs	Range of Turbidity	Typical Sources	Violation
Turbidity	2023	NTU	TT	N/A	0.178	0.062 - 0.178	Soil runoff.	**NO**

Turbidity measures the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the plant's filtration system. 100% of the samples taken met turbidity limits.

ORGANIC SUBSTANCES

Contaminant	Date Tested	Unit	MCL	MCLG	Range	Average Level	Highest Quarterly Locational Running Annual Average	Typical Sources	Violation
Haloacetic Acids (HAA)	2023	ppb	60	N/A	7 - 27	20	28	By-product of drinking water disinfection.	**NO**
Total Trihalomethanes (THM)	2023	ppb	80	N/A	12.6 - 54.2	39	49.1	By-product of drinking water chlorination.	**NO**
Total Organic Carbon*	2023	RAA	TT	N/A	0.94 - 1.28	1.0	N/A	Naturally present in the environment.	**NO**

*Total Organic Carbon (TOC) Treatment Technique (TT) - This value represents the waterworks ability to meet TOC percent removal requirements based on an annual average of the monthly percent removal ratios. TOC percent removal requirements are met when the calculated level is equal to or greater than 1.00.

RADIOLOGICAL SUBSTANCES

Contaminant	Date Tested	Unit	MCL	MCLG	Detected Level	Range	Typical Sources	Violation
Combined Radium 226 & 228	2022	pCi/L	5	0	0.5	N/A	Erosion of natural deposits.	**NO**
Gross Alpha	2022	pCi/L	50	0	0	N/A	Erosion of natural deposits.	**NO**

Although the MCL for beta emitters is 4 mrem/year, EPA considers 50 pCi/L to be the level of concern for beta particles. REM: The unit of dose equivalent from ionizing radiation to the total body or any internal organ or organ system.
A "milirem" (mrem) is 0.001 of a REM.

LEAD AND COPPER

Required to meet Action Levels (AL) at the Customer's Tap

Contaminant	Date Tested	Unit	Action Level	MCLG Level	Detected Level	Number of Homes Exceeding Action Level	Typical Sources	Violation
Copper	2022	ppm	AL=1.3	1.3	0.188	0	Corrosion of household plumbing systems; Erosion of natural deposits.	**NO**
Lead	2022	ppb	AL=15	0	1	0	Corrosion of household plumbing systems; Erosion of natural deposits.	**NO**

PLEASE SEE THE SECTION LABELED "LEAD AND COPPER MONITORING" FOR ADDITIONAL <u>IMPORTANT</u> INFORMATION. The City of Suffolk's Lead and Copper Monitoring Program meets EPA requirements for reduced monitoring. EPA requires sampling once every three years for systems with lead and copper results below the action level.

MICROBIAL SUBSTANCES

Contaminant	Date Tested	Unit	MCL	MCLG	Number of Positive Samples	Typical Sources	Violation
E. Coli Bacteria	2023	N/A	1 Positive Sample per Month	0	0	Human and Animal Fecal Waste	**NO**

SECONDARY AND UNREGULATED CONTAMINANTS

Contaminant	Date Tested	Unit	SMCL	Detected Level/Range	Typical Sources	Violation
Chloride	2023	ppm	250	13.6	Naturally present in the environment.	**NO**
Hardness	2023	ppm	NA	14.1	Compounds of Calcium and Magnesium; W**ater is considered soft below 60 ppm**.	**NO**
pH	2023	s.u.	6.5 - 8.5	7.71	Adjusted during the water treatment process.	**NO**
Sodium	2023	ppm	NA	54.7	Naturally present in the environment, also from use of chemical at the water treatment plant.	**NO**
Sulfate	2023	ppm	250	10.5	Naturally present in the environment, also from use of chemical at the water treatment plant.	**NO**
Total Dissolved Solids	2023	ppm	500	150	Naturally present in the environment.	**NO**
Zinc	2023	ppm	5	0.33	Naturally present in the environment, also from use of chemical at the water treatment plant.	**NO**