Whitehouse Farms Water System – 2020 Water Quality Report

The Whitehouse Farms Water System serves the Whitehouse Farms subdivision near Talleysville.

SOURCES AND TREATMENT OF DRINKING WATER
The source of the drinking water is groundwater. Two wells are located off Old Quarter Lane. Water from the wells is disinfected with sodium hypochlorite solution.

The Virginia Department of Health conducted a source water assessment of the two wells in 2019. The wells were determined to be of low susceptibility to contamination, using criteria developed by the State in its EPA-approved Source Water Assessment Program. The assessment report consists of maps showing the source water assessment area, an inventory of known land use activities of concern, and documentation of any known contamination within the last 5 years from the date of the assessment.

WATER QUALITY RESULTS
I. Microbiological Contaminants

Contaminant	MCLG	MCL	Number of Samples Indicating Presence of Bacteria	Violation (Y/N)	Month of Sampling	Typical Source of Contamination
Total Coliform Bacteria	0	Presence of bacteria in more than one sample per month	0	No	Jan-Dec	Naturally present in the environment

II. Lead and Copper Contaminants

Contaminant	Units of Measurement	Action Level	MCLG	Results of Samples for the 90th Percentile Value	Action Level Exceedance (Y/N)	Month of Sampling	# of Sampling Sites Exceeding Action Level	Typical Source of Contamination
Lead	ppb	15	0	<2	No	8/2019	0	Corrosion of household plumbing system; Erosion of natural deposits
Copper	ppm	1.3	1.3	0.051	No	8/2019	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

III. Other Chemical and Radiological Contaminants

Contaminant	Units of Measurement	MCLG	MCL	Level Detected	Violation (Y/N)	Range of Detection at Sampling Points	Date of Sample	Typical Source of Contamination
Combined Radium*	pCi/L	0	5	2.1	No	--	10/2017	Erosion of natural deposits
Gross Alpha	pCi/L	0	15	1.3	No	--	10/2017	
Gross Beta**	pCi/L	0	50	8.8	No	--	10/2017	Erosion of natural deposits; decay of man-made deposits
Nitrate	ppm	10	10	0.10	No	--	10/2020	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Fluoride	ppm	4	4	0.62	No	--	10/2018	Erosion of natural deposits
Trihalomethanes	ppb	80	80	14	No	--	8/2019	By-product of naturally occurring organic matter and chlorine added to the water
Haloacetic Acids	ppb	60	60	1.3	No	--	8/2019	
Barium	ppm	2	2	0.011	No	--	10/2018	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits

* Since Radium-226 is an alpha emitter, Gross Alpha Activity is used in place of Radium-226 when Radium-226 has not been analyzed.
** The PMCL for beta particles is 4 mrem/year. EPA considers 50 pCi/l to be the level of concern for beta particles.

IV. Unregulated Contaminants

Contaminant	Units of Measurement	Level Detected	Violation (Y/N)	Range of Detection at Sampling Points	Date of Sample	Typical Source of Contamination
Sulfate	ppm	13.8	No	--	10/2018	EPA and State Regulations require us to monitor this contaminant while EPA reconsiders its MCL.

V. Disinfectants

Disinfectant	Units of Measurement	MRDLG	MRDL	Level Detected (Annual Average)	Violation (Y/N)	Range of Detection at Sampling Points	Year	Typical Source
Chlorine	ppm	4	4	0.54	No	0.34-0.91	2020	Water additive used to control microbes

ADDITIONAL HEALTH INFORMATION
Samples collected in October 2018 indicated that the **drinking water from this water system contains sodium at concentrations of 74.2 mg/l.** Persons on a restricted sodium intake diet should not drink water containing a sodium concentration exceeding 20 mg/l.