

Martin Water Department *Water Quality Report 2021*

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Meeting location and time:
Martin City Hall
4th Tuesday, monthly at 6:30 PM

We purchase water from Prestonsburg City Utilities. The water plant facility uses a conventional treatment process consisting of coagulation, sedimentation, filtration and disinfection, along with corrosion control treatment and fluoridation (for dental health). Prestonsburg withdraws surface water from the Levisa Fork of the Big Sandy River. A source water protection plan has been developed for the water supply. As part of that plan an assessment to determine its susceptibility to contamination was conducted. Many of the potential contaminant sources rank high such as: mining, construction, roads/rail, sewage treatment plants, landfill and an active superfund site. Activities and land uses within the watershed can pose potential risks to your drinking water. Under certain circumstances contaminants could be released that would pose challenges to water treatment or even get into your drinking water. These activities, and how they are conducted, are of interest to our customers because they potentially affect your health and the cost of treating your water. The complete source water assessment can be reviewed at the Big Sandy Area Development District located in Prestonsburg, KY.

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 may be obtained by calling the Environmental Protection Agency's 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 may pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include: Microbial contaminants, such as viruses and bacteria, (sewage plants, septic systems, livestock operations, or wildlife). Inorganic contaminants, such as salts and metals, (naturally occurring or from stormwater runoff, wastewater discharges, oil and gas production, mining, or farming). Pesticides and herbicides, (stormwater runoff, agriculture or residential uses). Organic chemical contaminants, including synthetic and volatile organic chemicals, (by-products of industrial processes and petroleum production, or from gas stations, stormwater runoff, or septic systems). Radioactive contaminants, (naturally occurring or from oil and gas production or 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. FDA regulations establish limits for contaminants in bottled water to provide the same protection for public health.

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

Information About 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. Your local public 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>.

Some or all of these definitions may be found in this report:

Maximum Contaminant Level (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 (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 (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 (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.

Below Detection Levels (BDL) - laboratory analysis indicates that the contaminant is not present.

Not Applicable (N/A) - does not apply.

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, (µg/L). One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per trillion (ppt) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

Parts per quadrillion (ppq) - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.

Picocuries per liter (pCi/L) - a measure of the radioactivity in water.

Millirems per year (mrem/yr) - measure of radiation absorbed by the body.

Million Fibers per Liter (MFL) - a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU) - a measure of the clarity of water. Turbidity has no health effects. However, turbidity can provide a medium for microbial growth. Turbidity is monitored because it is a good indicator of the effectiveness of the filtration system.

Variances & Exemptions (V&E) - State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Action Level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system shall follow.

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

Spanish (Español) Este informe contiene información muy importante sobre la calidad de su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.

This report will not be mailed. Copies are available in our office. If you would like a copy mailed to you, please contact our office.

The data presented in this report are from the most recent testing done in accordance with administrative regulations in 401 KAR Chapter 8. As authorized and approved by EPA, the State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data in this table, though representative, may be more than one year old. Copies of this report are available upon request by contacting our office during business hours.

To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Martin Water Department Testing Results

Regulated Contaminant Test Results			Martin Water Department				
Contaminant [code] (units)	MCL	MCLG	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination
Chlorine (ppm)	MRDL = 4	MRDLG = 4	1.15 (highest average)	1.06 to 1.16	2021	No	Water additive used to control microbes.
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	66 (high site average)	10 to 100 (range of individual sites)	2021	YES	Byproduct of drinking water disinfection
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	120 (high site average)	17 to 195 (range of individual sites)	2021	YES	Byproduct of drinking water disinfection.
Household Plumbing Contaminants							
Copper [1022] (ppm) sites exceeding action level 0	AL = 1.3	1.3	0 (90th percentile)	0 to 0.006	Sep-21	No	Corrosion of household plumbing systems
TTHM(ppb) Individual Site	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Violation		
001	86.55	87.00	88.50	85.00	Yes		
002	119.73	115.00	120.25	109.00	Yes		

Prestonsburg City Utilities Testing Results

Regulated Contaminant Test Results			Prestonsburg City Utilities				
Contaminant [code] (units)	MCL	MCLG	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination
Radioactive Contaminants							
Beta photon emitters (pCi/L)	50	0	2.08	2.08 to 2.08	May-17	No	Decay of natural and man-made deposits
Alpha emitters [4000] (pCi/L)	15	0	2.15	2.15 to 2.15	May-17	No	Erosion of natural deposits
Combined radium (pCi/L)	5	0	1.317	1.317 to 1.317	May-17	No	Erosion of natural deposits
Uranium (µg/L)	30	0	0.268	0.268 to 0.268	May-17	No	Erosion of natural deposits
Inorganic Contaminants							
Barium [1010] (ppm)	2	2	0.059	0.059 to 0.059	May-21	No	Drilling wastes; metal refineries; erosion of natural deposits
Fluoride [1025] (ppm)	4	4	0.86	0.86 to 0.86	May-21	No	Water additive which promotes strong teeth
Nitrate [1040] (ppm)	10	10	0.25	0.25 to 0.25	Sep-21	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits
Selenium [1045] (ppb)	50	50	0.7	0.7 to 0.7	May-21	No	Discharge from petroleum and metal refineries or mines; erosion of natural deposits
Disinfectants/Disinfection Byproducts and Precursors							
Total Organic Carbon (ppm) (measured as ppm, but reported as a ratio)	TT*	N/A	1.09 (lowest average)	1 to 1.93 (monthly ratios)	2021	No	Naturally present in environment.
*Monthly ratio is the % TOC removal achieved to the % TOC removal required. Annual average must be 1.00 or greater for compliance.							
Other Constituents							
Turbidity (NTU) TT * Representative samples	Allowable Levels		Highest Single Measurement	Lowest Monthly %	Violation	Likely Source of Turbidity	
Turbidity is a measure of the clarity of the water and not a contaminant.	No more than 1 NTU* Less than 0.3 NTU in 95% of monthly samples		0.416	98	No	Soil runoff	

Violations 2021-7018357; 2021-7018358; 2021-7018359; 2022-7018361; 2022-7018362; 2022-7018363

Testing results showed that our system exceeded the standard, or maximum contaminant level (MCL), for trihalomethanes and haloacetic acids. The standard for trihalomethanes is 0.080 mg/L and the standard for haloacetic acids is 0.060 mg/L. It is determined by averaging all samples at each sampling location for the last 12 months. Trihalomethanes averaged at one of our system's locations for:

1/1/2021 through 3/31/2021 was 0.120 mg/L
4/1/2021 through 6/30/2021 was 0.115 mg/L
7/1/2021 through 9/30/2021 was 0.120 mg/L
10/1/2021 through 12/31/2021 was 0.109 mg/L

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. Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

Haloacetic acids averaged at one of our system's locations for:

1/1/2021 through 3/31/2021 was 0.065 mg/L
4/1/2021 through 6/30/2021 was 0.066 mg/L

We are working with our supplier to minimize the formation of trihalomethanes and haloacetic acids while ensuring we maintain an adequate level of disinfectant. We have taken additional steps to increase flushing of water lines to determine if our efforts have been effective. We are also monitoring water storage tank levels and water flow patterns within the distribution system. Public notices were issued for each quarter we were out of compliance.

Violation 2021-7018360

Our water system recently violated a drinking water standard. Although this incident was not an emergency, as our customers, you have a right to know what happened and what we did (are doing) to correct this situation.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During 1/1/2021-3/31/2021, we did not complete all monitoring by failing to report or correctly report testing for Haloacetic Acids and Trihalomethanes (OEL). Therefore, we could not verify the quality of your drinking water to the primacy agency during that time.

For the Stage 2 DBPR requirements we monitor for trihalomethanes (THM) and haloacetic acids (HAA). The standard for THM is 0.080 mg/L and the standard for HAA is 0.060 mg/L.

A calculation of analytical results is part of an Operational Evaluation Level Report (OEL) to determine the potential of exceeding these standards. The operational evaluation requirements are intended as an indicator of operational performance and to allow systems to identify proactive steps to remain in compliance. Failure to submit an evaluation report to the State in the required time frame is a violation and requires a public notification.

We failed to submit an OEL for the period 1/1/2021-3/31/2021. There is nothing you need to do. We have since submitted the documents to Division of Water and will do so in a timely manner for future reports.

For more information, please contact Jeff Lee at 606-285-3332 or PO Box 749, Martin, KY 41649.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.