

**2019 Annual Drinking Water Quality Report**  
**PWSID# 2590038 – Mansfield Borough Municipal Authority**

Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, ó hable con alguien que lo entienda. (This report contains important information about your drinking water. Have someone translate it for you, or speak with someone who understands it.)

**WATER SYSTEM INFORMATION:**

This report shows our water quality and what it means. If you have any questions about this report or concerning your water utility, please contact Casandra Cowles at (570)662-2589. We want you to be informed about your water supply. If you want to learn more, please attend any of our regularly scheduled meetings. They are held the third Wednesday of each month at 10:00 a.m. in the Dr. Robert E. Swinsick Council Room, located at 14 South Main Street.

**SOURCE(S) OF WATER:**

Our water sources are a combination of surface and ground water. The surface water is drawn from Webster Reservoir and Springs, located on Lambs Creek in Richmond Township. The ground water is drawn from Well No. 1, Well No. 2 and Well No. 3 located in the Lambs Creek Watershed.

A Source Water Assessment of the Lambs Creek Intake was completed by the PA Department of Environmental Protection (PADEP). The Assessment has found that the Lambs Creek intake has no potential threats. Overall, the Lambs Creek Watershed has little risk of significant contamination. A summary report of the Assessment is available on the Source Water Assessment Summary Reports eLibrary web page: <http://www.elibrary.dep.state.pa.us/dsweb/View/Collection-10045>. Complete reports were distributed to municipalities, water supplier, local planning agencies and PADEP offices. Copies of the complete report are available for review at the Pa. DEP North Central Regional Office, Records Management Unit at (570)327-3636.

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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

**MONITORING YOUR WATER:**

We routinely monitor for contaminants in your drinking water according to federal and state laws. The following tables show the results of our monitoring for the period of January 1 to December 31, 2019. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data is from prior years in accordance with the Safe Drinking Water Act. The date has been noted on the sampling results table.

**DEFINITIONS:**

*Action Level (AL)* – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

*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 contamination.

*Minimum Residual Disinfectant Level (MinRDL)* – The minimum level of residual disinfectant required at the entry point to the distribution system.

*Level 1 Assessment* – A Level 1 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

*Level 2 Assessment* – A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an *E.coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

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

*Mrem/year* = millirems per year ( a measure of radiation absorbed by the body)

*ppm* = Parts per million or Milligrams per liter (mg/L)

*ppq* = parts per quadrillion, or pictograms per liter

*pCi/L* = picocuries per liter (a measure of radioactivity)

*ppt* = parts per trillion, or nanograms per liter

*ppb* = parts per billion, or micrograms per liter (µg/L)

**DETECTED SAMPLE RESULTS:**

Chemical Contaminants								
Chemical Contaminant	MCL in CCR Units	MCLG	Highest Level Detected	Range in Detection s	Units	Sample Date	Violation Y/N	Sources of Contamination
Barium	2	0	0.05	0.05 – 0.05	ppm	7/25/18	N	Erosion of natural deposits
Chromium	100	100	1.93	1.93 – 1.93	ppb	7/18/18	N	Discharge from steel and pulp mills. Erosion of natural deposits
Fluoride	2	2	0.627	0.627 – 0.627	ppm	7/18/18	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories

Nitrate	10	10	0.361	-	ppm	7/18/18	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Total Trihalomethanes (TTHM)	80	N/A	28.70	6.90 – 28.70	ppb	1/15/19-10/15/19	N	By-product of drinking water chlorination
Haloacetic Acids (HAA)	60	N/A	8.09	0 – 8.09	ppb	1/15/19-10/15/19	N	By-product of drinking water chlorination
Radium – 226	5	0	.279	.279-.279	pCi/L	10/17/17	N	Erosion of natural deposits.
Chlorine (Distribution)	MRDL = 4	MRDLG = 4	1.03	-	ppm	03/19	N	Water Additive Used to Control Microbes

\*EPA's MCL for fluoride is 4 ppm. However, Pennsylvania has set a lower MCL to better protect human health.

Entry Point Disinfectant Residual							
Contaminant	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Chlorine	0.20	0.18	0.18 – 1.7	ppm	09/8/19	Y	Water additive used to control microbes.

Lead/Copper							
Contaminant	Action Level (AL)	MCLG	90 <sup>th</sup> Percentile Value	Units	# of Sites Above AL of Total Sites	Violation of TT Y/N	Sources of Contamination
Lead	15	0	2.90	ppb	0 of 20	N	Corrosion of household plumbing
Copper	1.3	1.3	.138	ppm	0 of 20	N	Corrosion of household plumbing

**Microbial (related to Assessments/Corrective Actions Regarding TC positive results)**

Contaminants	TT	MCLG	Assessments/Corrective Actions	Violation Y/N	Sources of Contamination
Total Coliform Bacteria	Any system that has failed to complete all the required assessments <b>or</b> correct all identified sanitary defects, is in violation of treatment technique requirement	N/A	See detailed description under "Detected Contaminants Health Effect Language and Corrective Actions" section	N	Naturally present in the environment

**Microbial (related to E. coli)**

Contaminants	MCL	MCLG	Positive Sample(s)	Violation Y/N	Sources of Contamination
E. coli	Routine and repeat samples are total coliform-positive <b>and</b> either is <i>E. coli</i> -positive <b>or</b> system fails to take repeat samples following <i>E. coli</i> -positive routine sample <b>or</b> system fails to analyze total coliform-positive repeat sample for <i>E. Coli</i>	0	0	N	Human and animal fecal waste

Contaminants	TT	MCLG	Assessments/Corrective Actions	Violation Y/N	Sources of Contamination
E. coli	Any System that has failed to complete all the required assessments <b>or</b> correct all identified sanitary defects, is in violation of the treatment technique requirement	N/A	See description under "Detected Contaminants Health Effects Language and Corrective Actions" section	N	Human and animal fecal waste.

**Turbidity**

Contaminant	MCL	MCLG	Level Detected	Sample Date	Violation (Y/N)	Source of Contamination
Turbidity	TT = 1 NTU for a single measurement	0	0.21	7/10/19	N	Soil Runoff

	TT = at Least 95% of monthly samples ≤ 0.3 NTU		100%		N	
--	--	--	------	--	---	--

Total Organic Carbon (TOC)					
Contaminant	Range of Removal Required	Range of % Removal Achieved	Number of Quarters out of Compliance	Violation (Y/N)	Source of Contamination
TOC	25% to 35%	0.0 – 0.0	0	N	Naturally present in the environment

**Violations:**

During 2019, we failed to collect required sample sets for Inorganic Chemicals (IOCs), Nitrate and Nitrite, and Volatile Organic Chemicals (VOCs). These contaminants will be sampled during 2020, and historical sample results show these contaminants are either not detected or are present at levels that do not exceed drinking water standards. During 2019, we incurred a Total Organic Carbon (TOC) sampling violation. The regulations require TOC and alkalinity to be sampled on the same day, but during July 2019 we sampled alkalinity two days after we sampled for TOC. The other 3 sample sets during 2019 were collected on the same day as required. During September 2019, we incurred a treatment technique violation under the Groundwater Rule and the Surface Water Treatment Rule when a malfunction at the treatment plant caused chlorine levels to drop to 0.18 ppm. You were notified to boil your water during that time until the issue was corrected and sample results showed the water was safe to consume without boiling.

**Educational Information:**

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:

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 run-off, 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 process and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- 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 and DEP prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA and DEP 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 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* (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.

Mansfield Municipal Authority 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 and 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>.