SUBURBAN LOCK HAVEN WATER AUTHORITY
2021 ANNUAL DRINKING WATER QUALITY REPORT

PWSID #: 4180049

Este informe contiene información muy importante sobre su agua de beber. Tradúzcalo ó hable con alguien que lo entienda bien. (This report contains very important information about your drinking water. Translate it 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 Greg Mayes at (570) 726-7443.

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 3rd Tuesday of the month at 7:00 PM at the Suburban Lock Haven Office at 7893 Nittany Valley Drive, Mill Hall.

SOURCE OF WATER:

Our water source is surface water from the Keller Reservoir located in Wayne Township and is filtered by the Central Clinton County Water Filtration Authority's plant in McElhattan

A Source Water Assessment of our source was completed in 2003 by the PA Department of Environmental Protection (PADEP). The Assessment has found that our source is potentially most susceptible to contamination from various agriculture practices, on-lot wastewater disposal, and transportation Corridors. Overall, our source before treatment has a moderate risk of significant contamination. Summary reports of the Assessment are available by writing to The City of Lock Haven Public Water System at 20 East Church Street Lock Haven, PA 17748, and will be available on the PADEP website at www.dep.state.pa.us (Keyword: "DEP source water"). 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 PADEP Willamsport, 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 microbial 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, 2021. 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. Some of our data is from Central Clinton County Water Filtration Authority (CCCWFA) and some are Suburban Lock Haven Water Authority (SLHWA) sample data. It is noted in the table.

DEFINITIONS AND ABBREVIATIONS:

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

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.

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.

Minimum Residual Disinfectant Level (MinRDL) - The minimum level of residual disinfectant required at the entry point to the distribution system.
Treatment Technique (TT) - A required process intended to reduce the level of a contaminant in drinking water.
pCi/L = picocuries per liter (a measure of radioactivity)
ppm = parts per million, or milligrams per liter (mg/L)
ppb = parts per billion, or micrograms per liter (µg/L)
Level 1 Assessment – A Level 1 assessment is a 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.

DETECTED SAMPLE RESULTS:

Entry Point Disinfectant Residual							
Contaminant	**Minimum Disinfectant Residual**	**Lowest Level Detected**	**Range of Detections**	**Units**	**Lowest Sample Date**	**Violation Y/N**	**Sources of Contamination**
Chlorine (CCCWFA) (2021)	0.20	0.97	0.97 – 1.56	ppm	9/10/21	N	Water additive used to control microbes.

Chemical Contaminant	**MCL In CCR Units**	**MCLG**	**Highest Level Detected**	**Range of Detections**	**Units**	**Violation Y/N**	**Sources of Contamination**
Distribution Chlorine (SLHWA) (2021)	MRDL = 4	MRDLG = 4	1.19 (February)	0.69-1.19	ppm	N	Water additive used to control microbes
TTHMs [Total Trihalomethanes (SLHWA) (2021)	80	N/A	55.275***** 3rd Quarter	28.30-69.10	ppb	N	By-product of drinking water chlorination
Haloacetic Acids (HAA) (SLHWA) (2021)	60	N/A	29.30***** 2nd Quarter	18.50-33.30	ppb	N	By-product of drinking water disinfection

Contaminant	MCL	MCLG	Level Detected	Sample Date	Violation Of TT Y/N	Source of Contamination
Turbidity (CCCWFA)	TT=1 NTU for a single measurement	0	0.252 NTU	9/13/21	N	Soil runoff
	TT= at least 95% of monthly samples ≤0.3 NTU		100 %	2021	N	

***Indicates that these are the highest running annual averages calculated during 2021.**

Turbidity *is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.*

Total Organic Carbon *(TOC)*-CCCWFA *tests quarterly for T.O.C.'s and due to very low levels in their source water they meet an alternative compliance criteria (ACC) for which we had no violations in 2021.*

Lead and Copper							
Contaminant	**Action Level (AL)**	**MCLG**	**90th Percentile Value**	**Units**	**# of Sites Above AL of Total Sites**	**Violation Y/N**	**Sources of Contamination**
Lead (SLHWA) (2019)	15	0	1.61	ppb	1 out of 21	N	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (SLHWA) (2019)	1.3	1.3	0.063	ppm	0 out of 21	N	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

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. Suburban Lock Haven Water 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 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 *www.epa.gov/safewater/lead*

Microbial (related to E. coli)					
Contaminants	**MCL**	**MCLG**	**Positive Sample**	**Violation Y/N**	**Sources of Contamination**
E. coli	Routine and repeat samples are total coliform-positive **and** either is *E. coli*-positive, **or** system fails to take repeat samples following *E. coli*-positive routine sample **or** system fails to analyze total coliform-positive repeat sample for *E. coli.*	0	6/9/21	Y	Human and animal fecal waste.

E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term health effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems. We violated the standard for E. coli indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct a detailed assessment to identify problems and to correct any problems that were found during these assessments.

Violations: We were required to complete a Level 2 assessment because we found E. coli in our distribution system on June 9, 2021. As a result, we were required to conduct a detailed Level 2 assessment of our system within 30 days. A Level 2 assessment is a detailed study of the water system treatment and distribution to identify potential problems and determine (if possible) why E. coli bacteria have been found in our water system. We failed to conduct the required Level 2 assessment within 30 days and have therefore violated a drinking water requirement. The assessment was completed on 3/4/22 and Public Notification was distributed at that time.

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 storm water 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 storm water 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 storm water 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).