



2024 \_\_\_\_\_ **ANNUAL DRINKING WATER QUALITY REPORT**

**PWSID #:** 7220022 \_\_\_\_\_ **NAME:** Lykens Borough 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 Lykens Borough Authority Office \_\_\_\_\_ at 717-453-7279 \_\_\_\_\_. 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 on the second Wednesday of each month at 6:00 PM and are held at 200 Main St., Lykens, PA 17048 \_\_\_\_\_.

**SOURCE(S) OF WATER:**

Our water source(s) is/are: (Name-Type-Location)

Rattling Creek, Source Code 001

Well #1, Source Code 002 which draws from Alluvial Mantle Aquifer

A Source Water Assessment of our source(s) was completed by the PA Department of Environmental Protection (Pa. DEP). The Assessment has found that our source(s) of is/are potentially most susceptible to [insert potential Sources of Contamination listed in your Source Water Assessment Summary]. Overall, our source(s) has/have [little, moderate, high] risk of significant contamination. A summary report of the Assessment is available on the Source Water Assessment Summary Reports eLibrary web page: [Source Water Assessment Folder](#). Complete reports were distributed to municipalities, water suppliers, local planning agencies and Pa. DEP offices. Copies of the complete report are available for review at the Pa. DEP Southcentral Regional Office, Records Management Unit at (717) 705-4732.

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, 2024. 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 contaminants.

**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 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)

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

**ppb** = parts per billion, or micrograms per liter ( $\mu\text{g/L}$ )

**ppm** = parts per million, or milligrams per liter ( $\text{mg/L}$ )

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

**ppt** = parts per trillion, or nanograms per liter ( $\text{ng/L}$ )

**DETECTED SAMPLE RESULTS:**

<b>Chemical Contaminants</b>								
Contaminant	MCL in CCR Units	MCL G	Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Nitrate	10	10	1.2	1.2-2.2	ppm	6/6/24	N	Runoff from fertilizer
Barium	2	2	0.033	0.033-0.14	ppm	4/9/24	N	Discharge of drilling waste: Discharge from metal refineries Erosion of natural deposits
Chlorine	MRDL = 4.0	MRDL = 4.0	0.94	0.94-2.19	ppm	3/14/24	N	Water additive to control microbes
Halocetic Acids HAA5	60	NA	0.060	0.00607-0.01167	ppb	11/12/24	N	By-Product of drinking water disinfection
Total Trihalomethanes TTHM	80	NA	0.0869	0.0232-0.0869	ppb	11/12/24	Y	By-Product of drinking water disinfection

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

<b>Entry Point Disinfectant Residual</b>							
Contaminant	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Chlorine Entry Point 101	0.20	0.94	0.94-2.19	ppm	7/25/24	N	Water additive used to control microbes.
Chlorine Entry Point 102	0.20	1.40	1.40-2.90	ppm	3/14/24	N	Water additive used to control microbes.

<b>Lead and Copper</b>								
Contaminant	Action Level (AL)	MCL G	90 <sup>th</sup> Percentile Value	Range of tap sampling results	Units	# of Sites Above AL of Total Sites	Violation Y/N	Sources of Contamination
Lead	15	0	2	0-2	ppb	0	N	Corrosion of household plumbing.
Copper	1.3	1.3	1.32	0-1.32	ppm	0	N	Corrosion of household plumbing.

<b>Microbial (related to Assessments/Corrective Actions regarding TC positive results)</b>					
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 or correct all identified sanitary defects, is in violation of the treatment technique requirement	N/A	See detailed description under "Detected Contaminants Health Effects Language and Corrective Actions" section	N	Naturally present in the environment.

<b>Microbial (related to E. coli)</b>					
Contaminants	MCL	MCLG	Positive Sample(s)	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	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 or 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.

<b>Turbidity</b>						
Contaminant	MCL	MCLG	Level Detected	Sample Date	Violation Y/N	Sources of Contamination
Turbidity	TT=1 NTU for a single measurement	0	0.388	3/1/24	N	Soil runoff
	TT= at least 95% of monthly samples ≤0.3 NTU		100%	2024	N	

<b>Total Organic Carbon (TOC)</b>					
Contaminant	Range of % Removal Required	Range of percent removal achieved	Number of quarters out of compliance	Violation Y/N	Sources of Contamination
TOC	35	37.5%	0	N	Naturally present in the environment

**DETECTED CONTAMINANTS HEALTH EFFECTS LANGUAGE AND CORRECTIVE ACTIONS:**

TTHM - Some people who drink water containing Trihalomethanes in excess of the MCL over many years experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer. Corrective actions: Due to loss of business that used a good amount of water, we have implemented a monthly hydrant flush on that end of the line to ensure clean and safe drinking water.

HAA5- Some people who drink water containing Haloacetic Acids in excess of the MCL over many years may have an increased risk of getting cancer. Corrective actions: Due to loss of business that used a good amount of water, we have implemented a monthly hydrant flush on that end of the line to ensure clean and safer drinking water.

**OTHER VIOLATIONS:**

Haloacetic Acids - Failure to Monitor during time specified April 2024

Trihalomethanes - Failure to Monitor during time specified April 2024

Trihalomethanes - Failure to Monitor during time specified July 2024

Total Alkalinity - Failure to Monitor during time specified January 2024

Total Organic Carbon - Failure to Monitor during time specified January 2024

Haloacetic Acids - above average MCL

**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 processes 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**

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. Lyken Borough Authority is responsible for providing high quality drinking water and removing lead pipes, but cannot control the

variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact Lyken Borough Authority at 717-453-7597. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <http://www.epa.gov/safewater/lead>.

**OTHER INFORMATION:**

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Lykens Borough Authority prepared a service line inventory of our system that includes the type of materials contained in each service line in our distribution system. This inventory can be accessed at our office at 717-453-7597.