2022
Annual Drinking Water Quality Report

Lincoln Township Municipal Authority
PWSID# 4560031

We are pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water.

Our water source is a well located off of North Fork Road in Lincoln Township and purchased water from the Somerset County General Authority.

We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the 2nd Monday of each month at 6:00 p.m. at the Lincoln Township Municipal Office, located at 1036 Schoolhouse Road, Sipesville, PA 15561.

Lincoln Township Municipal Authority (LTMA) routinely monitors for contaminants in your drinking water according to Federal and State laws. The table below shows the results of our monitoring for the period of January 1st to December 31st, **2022**. We have learned through our monitoring and testing that some contaminants have been detected.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and drug administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

MCL's are set at very stringent levels for health effects. To understand the possible health effects described for many regulated constituents, 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.

TEST RESULTS

Table 1: Entry Point Disinfectant Residual

Contaminant (Unit of Measurement)	Violation Yes/No	Lowest Level Detected	Range of Detections	Sample Date	Minimum Disinfectant Residual	Major Sources in Drinking Water
Chlorine (ppm)	No	.44	2.01 -.44	06/21/22	0.40	Water additive used to control microbes

Chemical Contaminants

Contaminant (Unit of measurement)	Violation Y/N	Level Detected	Range	MCLG	MCL	Likely Source of Contamination
Barium (ppm)	N	**.0673** 2022	(a)	2	2	Discharge of drilling wastes or metal refineries erosion of natural deposits
Fluoride (ppb)	N	**.1** 2021	(a)	2	2	Erosion of natural deposits discharge from fertilizer and aluminum factories
Nickel (ppm)	N	0.0007 2022	(a)	2	2	Erosion of natural deposits

Lead and Copper

Contaminant (Unit of measurement)	Violation Y/N	Level Detected	Range	MCLG	MCL	Likely Source of Contamination
Lead (ppb)	N	**7.7** 2022	(c)	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Copper (ppm)	N	**.246** 2022	(c)	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Disinfection Byproducts and Disinfection Residuals

Contaminant (Unit of measurement)	Violation Y/N	Level Detected	Range	MCLG	MCL	Likely Source of Contamination
TTHM [Total trihalomethanes] (ppb)	N	**28** 2022	(c)	n/a	80	By-product of drinking water chlorination
Haloacetic Acids (five) (ppb)	N	**37** 2022	(c)	n/a	60	By-product of drinking water chlorination
Chlorine (ppm) (distribution)	Y	**1.43 Apr**	**.74 to 1.43**	MRDL =4	MRDLG= 4	Water additive used to control microbes.

Somerset County General Authority - PWSID #4560009

Table 1: Entry Point Disinfectant Residual						
Contaminant (Unit of Measurement)	Violation Yes/No	Lowest Level Detected	Range of Detections	Sample Date	Minimum Disinfectant Residual	Major Sources in Drinking Water
Chlorine (ppm)	No	1.18 (3-8-22)	1.18 -1.57	2022	0.20	Water additive used to control microbes

Table 2: Chemical Contaminants						
Contaminant (Unit of Measurement)	Violation Yes/No	Level Detected	Range	MCL	MCLG	Major Sources in Drinking Water
Distribution System Chlorine (ppm)	No	1.25 (Jan. 22)	1.06 – 1.25	MRDL = 4	MRDLG = 4	Water additive used to control microbes
Barium (ppm)	No	0.0308	-	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Nickel (ppm)	No	0.0016	-	2	2	Erosion of natural deposits
Nitrate (ppm)	No	0.85	-	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
TTHM (Total Trihalomethanes) (ppb)	No	34.6	-	80	N/A	By-product of drinking water disinfection
HAA5 (Haloacetic Acids) (ppb)	No	34.4	-	60	N/A	By-product of drinking water disinfection
Gross Alpha (pCi/L) (9-9-2020)	No	6.04	-	15	0	Erosion of natural deposits

Table 3: Turbidity						
Contaminant (Unit of Measurement)	MCL	MCLG	Level Detected	Sample Date	Violation Yes/No	Major Sources in Drinking Water
Turbidity (NTU)	TT = 1 NTU for a single measurement	0	0.140	3/5/22	No	Soil Runoff
	TT = at least 95% of monthly samples $\leq$ 0.3 NTU		100%	2022	No	

Table 4: Total Organic Carbon (TOC)					
Contaminant	Range of % Removal Required	Range of % Removal Achieved	Number of Quarters out of Compliance	Violation Yes/No	Major Sources in Drinking Water
Total Organic Carbon (TOC)	35%	22% - 36%	None*	No	Naturally present in the environment

***Alternative Compliance Criteria (ACC) were used to determine compliance**

Table 5: Microbial					
Contaminant	TT	MCLG	Assessments/ Corrective Actions	Violation Yes/No	Major Sources in Drinking Water
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	No	Human and animal fecal waste

Table 6: Microbial (related to E. coli)					
Contaminant	MCL	MCLG	Positive Sample(s)	Violation Yes/No	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	1	No	Human and animal fecal waste

Detected Contaminants Health Effects Language and Corrective Actions:

Coliforms are bacteria that *are naturally present in the environment and are used as an indicator that other potentially harmful, bacteria may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.*

During the past year, we were required to conduct one Level 1 assessment. One Level 1 assessment was completed, with no deficiencies being found. In January of 2022, we detected total coliform bacteria and *E.coli* in our routine monthly bacteria samples. Check samples were immediately taken and were found to be free of any total coliform bacteria or *E.coli*. Since the check samples were clear, there was no confirmation of contamination and therefore, no violation of the *E.coli* MCL occurred.

***Alternative Compliance Criteria (ACC) were used to determine compliance**

Footnotes:

(a) Only one sample required.

(b) 100% of the turbidity samples met the turbidity limits.

(c) All samples were below the action levels.

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

- *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* - one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.
- *Nephelometric Turbidity Unit* **(NTU)** - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person. We monitor it because it is a good indicator of the effectiveness of our filtration system.
- **Action Level (AL)** – the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **Treatment Technique (TT)** - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
- **Maximum Contaminant Level** - The "Maximum Allowed" (**MCL**) is 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** - The "Goal" (**MCLG**) is 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.

Health Effects:

Lead: infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested or flush your tap 30 seconds to 2 minutes before using tap water. Additional information is available from the safe drinking water hotline or at http://www.epa.gov/safewater/lead .

LTMA received a violation for a VOC sample that was missed during the 2020 monitoring year and were taken immediately upon notification in 2021. We're proud that your drinking water meets or exceeds all Federal and State requirements.

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).

All sources of drinking water are subject to potential contamination by constants that are naturally occurring or man-made. All 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 the 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 at 1-800-426-4791. The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface or through the ground, it dissolves naturally occurring minerals, and in some cases, radio-active material, and can pick up substances resulting from the presence of animals or human activity. Contaminants that may be present in source water before we treat it include:

- Microbial contamination: 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 run-off, industrial or domestic wastewater, oil and gas production, mining, or farming.
- Pesticides and Herbicides: Which may come from a variety of sources such as agriculture, urban storm runoff, and residential uses.
- Organic Chemical Contaminants: Synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, gas stations, urban runoff, and septic systems.
- Radioactive Contaminants: Which can be naturally occurring or be the result of oil and gas production and mining activities

We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

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.)

If you have any questions about this report or concerning your water utility, please contact **LTMA *at (814)701-2346***