pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF SAFE DRINKING WATER

2020 ANNUAL DRINKING WATER QUALITY REPORT

PWSID #: 7360084 **NAME:** Leacock Township Municipal Authority

Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, ó hable con alguien q-ue 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 Steve Demars by phone at (717) 705-4832 or by email at sdemars@pa.gov. We want you to be informed about your water supply.

SOURCES OF WATER:

Our water source is groundwater that is supplied by three (3) municipal wells (Township well, Stoltzfus well, and Hollander well). The Township well is adjacent to the water treatment plant. The Stoltzfus well is located north of town near Muddy Run. The Hollander well is located northeast of town, off North Hollander Road.

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, 2020.

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 (µg/L)

ppm = parts per million, or milligrams per liter (mg/L)

ppq = parts per quadrillion, or picograms per liter

ppt = parts per trillion, or nanograms per liter

DETECTED SAMPLE RESULTS:

Chemical Contaminants								
Contaminant	**MCL in CCR Units**	**MCLG**	**Level Detected**	**Range of Detections**	**Units**	**Sample Date**	**Violation Y/N**	**Sources of Contamination**
Chlorine	MRDL=4	MRDLG=4	1.14	0.57-1.14	ppm	2020	N	Water additive used to control microbes.
Nitrate	10	10	4.0	3.6-4.9	ppm	2020	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
HAA5	60	NA	3.4	2.3-3.4	ppb	August 2020	N	By-product of drinking water disinfection
THHM	80	NA	5.2	4.1-5.2	ppb	August 2020	N	By-product of drinking water disinfection
Gross Alpha	15	0	1.53	0-6.76	pCi/l	2020	N	Erosion of natural deposits
Gross Beta	50*	0	-0.105	-0.944-0.734	pCi/L	2019	N	Erosion of natural and man-made deposits
Combined Radium	5	0	0.17	0-1	pCi/l	2020	N	Erosion of natural deposits

*EPA considers 50 pCi/L to be the level of concern for beta particles.

Entry Point Disinfectant Residual							
Contaminant	**Minimum Disinfectant Residual**	**Lowest Level Detected**	**Range of Detections**	**Units**	**Sample Date**	**Violation Y/N**	**Sources of Contamination**
Free Chlorine	0.40	0.61	0.61-1.32	ppm	2020	N	Water additive used to control microbes.

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	15	0	4	ppb	0 out of 40	N	Corrosion of household plumbing systems; Erosion of natural deposits
Copper	1.3	1.3	0.109	ppm	0 out of 40	N	Corrosion of household plumbing; Erosion of natural deposits; Leaching from wood preservatives

DETECTED CONTAMINANTS HEALTH EFFECTS LANGUAGE AND CORRECTIVE ACTIONS:

No contaminants were above the MCL or action level during the monitoring period of January 1 to December 31, 2020.

OTHER VIOLATIONS:

Our water system is required to sample for disinfectant/disinfection by-products (DDBPs), trihalomethanes (TTHM) and haloacetic acids (HAA5), annually within three days (+/-) of August 15. In 2020, we did not properly test for these DDBPs, sampling outside the seven-day window on August 5. Since the correct number of samples (two TTHM and two HAA5 samples) were collected and were collected close to the required window, no additional sampling was required. Even though this was not an emergency, as our customers, you have a right to know what happened and what we did to correct this situation. No alternative water source is necessary, and there is nothing you need to do at this time. We will continue to monitor for DDBPs in 2021 within three days (+/-) of August 15.

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. As shown in the chemical contaminants table above, the concentrations of the DDBPs were not detected above the MCLs.

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).

If you want more information about TTHM and HAA5 or the drinking water violation, please call us at (717) 929-0869.

OTHER INFORMATION:

During the monitoring period of January 1 to December 31, 2020, there were no detections of total coliform, volatile organic compounds (VOCs), synthetic organic compounds (SOCs), or nitrite.

Results of all drinking water quality monitoring can be viewed on the DEP’s Drinking Water Reporting System at http://www.drinkingwater.state.pa.us/dwrs/HTM/Welcome.html.

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

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. The Leacock Township 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 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*.

Information about Nitrates

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.