2024 ANNUAL DRINKING WATER REPORT

PWSID#: 1090121 NAME: The Enclave Water System (Township of Upper Makefield)

This report presents a summary of the quality of public drinking water provided by Upper Makefield Township to the Enclave Water System during 2024. During 2024, the water provided from the Township's two wells never exceeded the maximum contaminant levels set by the Pennsylvania Department of Environmental Protection (PADEP) and the Environmental Protection Agency (EPA) Safe Drinking Water Act. The Upper Makefield Township Board of Supervisors is committed to providing safe and reliable drinking water service to all of its valued customers and to inform them of the quality and safety of their drinking water.

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 John Scully, Private Utility Enterprises, Inc., 1000 East Walnut Street, Suite 721, Perkasie, PA 18944 at 215-766-2626 or the Township water and wastewater Consulting Engineer, CKS Engineers, Inc., at 215-340-0600.

We want you to be informed about your water supply. If you want to learn more, you may attend any of the Township's Board of Supervisors Scheduled meetings. They are typically held on the first Tuesday of each month, 7:30 PM at the Upper Makefield Township Municipal Building, 1076 Eagle Road, Newtown, PA 18940. Updated meeting information can be found on the Upper Makefield Township website.

SOURCE(S) OF WATER:

The Township water source is derived from two (2) groundwater wells isolated within Township easements located within the Enclave subdivision. The system operates year-round and serves 96 residential connections and on average serves 200 people per day.

> 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 the 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 (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 (ng/L)

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	1.46	0.97 – 1.94	ppm	2024	N	Water additive used to control microbes.
Alpha Emitters	15	0	0.45	0.15 – 0.98	pCi/L	2016	N	Erosion of natural deposits.
Combined Radium	5	0	0.37	0.03 – 0.64	pCi/L	2016	N	Erosion of natural deposits.
Uranium	30	0	0.03	0.06	ppb	2016	N	Erosion of natural deposits.
Trihalomethane (TTHM)	80	N/A	8.86	8.4 – 9.32	ppb	2024	N	By-product of drinking water disinfection (chlorination).
Haloacetic Acids (HAA5)	60	N/A	4.11	0 – 4.11	ppb	2024	N	By-product of drinking water disinfection (chlorination).

Entry Point Disinfectant Residual							
Contaminant	**Minimum Disinfectant Residual**	**Lowest Level Detected**	**Range of Detections**	**Units**	**Sample Date**	**Violation Y/N**	**Sources of Contamination**
Chlorine	0.4	0.71	0.71 – 2.15	ppm	2024	N	Water additive used to control microbes.

Lead and Copper – 2022 Sampling							
Contaminant	**Action Level (AL)**	**MCLG**	**90th Percentile Value**	**Range of Tap Sampling Results**	**Units**	**# of Sites Above AL Total Sites**	**Sources of Contamination**
Lead	15	0	0.3	N/A	ppb	0 out of 9	Corrosion of household plumbing; Erosion of natural deposits.
Copper	1.3	1.3	0.21	N/A	ppm	0 out of 9	Corrosion of household plumbing.

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. The Enclave Water System is responsible for providing high quality drinking water and it 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 the Safe Drinking Water Hotline or at *http://www.epa.gov/safewater/lead*.

INFORMATION ABOUT PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)

PFAS chemicals are among a family of a man-made compounds that have been used for decades as ingredients to make products resistant to heat, oil, stains, grease, and water. PFAS chemicals can be found in industrial and consumer products such as clothing, carpeting, food packaging, non-stick

cookware, firefighting foam, personal care products, adhesives, metal plating, wire manufacturing and many other uses. In January 2023, PA DEP set new drinking water standards for PFOA and PFOS contaminants that are part of the larger group of PFAS chemicals. The new regulations set an MCL of 14 PPT for PFOA and an MCL of 18 PPT for PFOS.

PFAS testing was not required in the 2024 reporting year for The Enclave Water System because less than 350 residents are served. However, the 2025 calendar year will require PFAS quarterly testing be performed for water systems serving 350 residents or less.

OTHER INFORMATION:

If you witness any release of petroleum products or other hazardous substances into the environment, please call the Pennsylvania Department of Environmental Protection (PA DEP) emergency hotline at 484-250-5900.

As part of our continued compliance with EPA's Lead and Copper Rule Revisions (LCRR), Upper Makefield Township prepared a service line inventory of our system that includes the type of material contained in each service line in our distribution system. This inventory can be accessed by contacting our office at 215-968-3340.

A service line inventory is the piping that connects your household or building plumbing to the water main in the street. Ownership varies by water system but is typically split between the water system and the customer. Upper Makefield Township owns the section of the service line from the water main to the curb stop located near the curb or street line, while the section from the curb stop to inside the premises, including all internal plumbing, is owned by the customer. The service lines at the Enclave are known to be constructed of copper piping and are therefore classified as non-lead.

Throughout calendar year 2024, Upper Makefield Township monitored for the microbial contaminant *Total Coliform Bacteria* in the distribution system and no positive sample results were detected. Thus, the system was not required to comply with the Level 1 or Level 2 assessment requirements. The system is in compliance with the treatment technique requirement.