2024 ANNUAL DRINKING WATER QUALITY REPORT PWSID #:7360135 NAME: EAST PETERSBURG BOROUGH WATER DEPARTMENT

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 <u>Scott Liggins 717-569-2321</u>. 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 first Tuesday of each month at the Community Center, 6051 Pine Street, East Petersburg, PA at 7:00 pm.

SOURCE(S) OF WATER:

Our water sources are: <u>Gravers Spring - Lititz, PA 17543</u> <u>Well 1 - East Petersburg, PA 17520</u> Lancaster City Interconnection – East Petersburg, PA 17520

A Source Water Assessment of our sources was completed by the PA Department of Environmental Protection (PA DEP). The Assessment has found that our sources are potentially most susceptible to agricultural applications of fertilizers and other chemicals, residential herbicides and pesticide chemical application, fuel storage accidents and spills along transportation corridors, and road deicing activities. Overall, our sources have moderate risk of significant contamination. A summary report of the Assessment is available on the Source Water Assessment Summary Reports eLibrary web page: <u>Source Water Assessment Folder</u>. Complete reports were distributed to municipalities, water supplier, local planning agencies and PA DEP offices. Copies of the complete report are available for review at the PA DEP South Central Regional Office, Records Management 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, 2024 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 (μ g/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
Distribution Chorine	4	4	2.40	0.75-2.40	ppm	2024	N	Water additive used to control Microbes.
Trihalomethanes (TTHM)	80	80	41	9.46-118.0	ppb	2024	N	Byproduct of Disinfection.
Haolacetic Acids (HAA5)	60	60	30	1.0 – 95.5	ppb	2024	N	Byproduct of Disinfection.
Nitrates-Spring	10	10	5	3.91-4.59	ppm	2024	N	Run off from Fertilizer use, Erosion of natural deposits.
Nitrates-Well	10	10	6	5.50-6.03	ppm	2024	N	Run off from Fertilizer use, Erosion of natural deposits.
Arsenic-Spring	6	6	5		ppb	2024	Ν	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Arsenic-Well	6	6	6		ppb	2024	Ν	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Perfluorooctanoic acid (PFOA)-Spring	14	8	5.16	4.82-5.52	ppt	2024	Ν	Discharge from manufacturing facilities and runoff from land use activities.
Perfluorooctanoic acid (PFOA)-Well	14	8	4.73	4.25-5.06	ppt	2024	Ν	Discharge from manufacturing facilities and runoff from land use activities.
Perfluorooctanesulfonic acid (PFOS)-Spring	18	14	4.89	4.65-5.11	ppt	2024	Ν	Discharge from manufacturing facilities and runoff from land use activities.
Perfuorooctanefulfonic acid (PFOS)-Well	18	14	10.76	9.77-11.20	ppt	2024	N	Discharge from manufacturing and runoff from land use activities.
Fluoride	2*	2	0.2		ppm	2/21/2024	N	Water additive that promotes strong teeth.

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

Entry Point Disinfectant Residual									
Contaminant	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination		
SPRING-	0.2	0.53	0.53-2.27		11/27/2024	Ν			
WELL-	0.40	0.43	0.43-2.37	ppm	1/28/2024	Ν	Water additive used to control Microbes.		

Lead and Copp	Lead and Copper								
Contaminant	Action Level (AL)	MCLG	90 th Percentile Value	Range of tap sampling results	Units	# of Sites Above AL of Total Sites	Violation Y/N	Sources of Contamination	
Lead	15	0	4	2 - 16	ppb	1 of 20	N	Corrosion of household plumbing.	
Copper	1.3	1.3	0.259	0.02-0.27	ppm	0 of 20	Ν	Corrosion of household plumbing.	

Contaminants	Π	MCLG	Assessments/ Corrective Actions	Violation Y/N	Sources of Contamination
Total Coliform	Any system that has failed	N/A	See detailed	N	Naturally present in
Bacteria	to complete all the required assessments or correct all identified sanitary defects, is in violation of the treatment technique requirement.		description under "Detected Contaminants Health Effects Language and Corrective Actions" section.		the environment.

Microbial (related to E	E. coli)				
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 <i>E.</i> <i>coli</i> -positive or system fails to take repeat samples following <i>E. coli</i> -positive routine sample or system fails to analyze total coliform- positive repeat sample for <i>E. coli</i> .	0	0	Ζ	Human and animal fecal waste.
Contaminants	тт	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.	Ν	Human and animal fecal waste.

Turbidity						
Contaminant	MCL	MCLG	Level Detected	Sample Date	Violation Y/N	Source of Contamination
Turbidity	TT=1 NTU for a single measurement	0	1.014	12/20/24	N	Soil runoff.
	TT= at least 95% of monthly samples <u><</u> 0.3 NTU				Ν	

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

DETECTED CONTAMINANTS HEALTH EFFECTS LANGUAGE AND CORRECTIVE ACTIONS: _____

OTHER VIOLATIONS:

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. East Petersburg Borough 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 East Petersburg Borough at 717-569-2321. 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.

Arsenic: While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

<u>Nitrate</u>: 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.

<u>Other Information</u>: East Petersburg Borough 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 by contacting our office at 717-569-2321.

DETECTED SAMPLES: SUSQUEHANNA WATER TREATMENT PLANT; ENTRY POINT 101 FROM LANCASTER CITY PWSID 7360058

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Chemical Contamin	Chemical Contaminants									
Contaminant	MCL in CCR Units	MCLG	Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination		
Barium	2	2	0.024		ppm	2024	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits		
Fluoride	2*	2	0.74		ppm	2024	N	Water additive that promotes strong teeth.		
Nickel	10	10	0.001		ppm	2024	N	Discharge from industrial processes. Erosion of natural deposits.		
Nitrate	10	10	1.19		ppm	2024	Ν	Runoff from fertilizer use; Leaching from septic tanks, Sewage; Erosion of natural deposits		
Gross Alpha	15	0	-0.234		pCi/L	2023	N	Erosion of natural deposits		
Combined Radium	5	0	0.3222		pCi/L	2023	N	Erosion of natural deposits		

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

Turbidity											
Contaminant	MCL	MCLG	Level Detected	Sample Date	Violation Y/N	Source of Contamination					
Turbidity	TT=1 NTU for a single measurement	0	0.09 NTU	08/13/24	Ν	Soil runoff.					
	TT= at least 95% of monthly samples <u><</u> 0.15 NTU		<u><</u> 0.15 NTU 100% of the time	Jan - Dec 2024	Ν						

Total Organic Carbon (TOC)								
Contaminant	Range of percent Removal Required	Range of percent removal achieved	Number of quarters out of compliance	Violation Y/N	Sources of Contamination			
TOC	0% - 35%	13% - 44%	0	Ν	Naturally present in environment.			

Entry Point Disinfectant I	Entry Point Disinfectant Residual: Susquehanna and Conestoga Treatment Plants									
Contaminant	MinRDL	Lowest Level Detected	Range of Detections	Units	Date of Lowest Sample	Violation Y/N	Sources of Contamination			
Susquehanna Plant Chlorine	0.20	0.89	0.89 - 2.39	ppm	03/24/24	Ν	Water additive used to control microbes.			
Conestoga Plant Chlorine	0.20	0.36	0.36 - 1.40	ppm	07/23/24	Ν	Water additive used to control microbes.			