2023 ANNUAL DRINKING WATER QUALITY REPORT
SUMMIT TOWNSHIP WATER AUTHORITY
PWSID #6250090

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 the drinking water quality provided by the Summit Township Water Authority and what it means. If you have any questions about this report or concerning your water utility, please contact Brian Hiles, Authority Manager at 814-864-2323. We want you to be informed about your water supply. If you want to learn more, please attend any of our regularly scheduled Water Authority meetings. They are held the first Tuesday of each month at 9:00 am. at the Summit Township Municipal Building, 1230 Townhall Road West; Erie, PA 16509.

Sources of Water:
The Summit Township Water Authority purchases bulk water from the Erie City Water Authority. The Erie City Water Authority has an intake in Lake Erie and provides treatment to meet drinking water standards at two (2) treatment plants. The bulk water purchased from the Erie City Water Authority is served to the northern portion of the Township along Route 19, Route 97 and adjacent areas.

The Summit Township Water Authority also has well fields in Waterford Township. The well fields serve the southern portion of the Township.

The Summit Township Water Authority owns and operates a water distribution system within the Township consisting of pipelines, pump stations and storage tanks.

A Source Water Assessment of the Lake Erie source, treated and supplied by the Erie City Water Authority, was completed by the Pennsylvania Department of Environmental Protection (PADEP). The assessment found that the Lake Erie source is potentially most susceptible to storm water discharges and freighter traffic. Overall, the Lake Erie source has a low risk of significant contamination. A summary report of the assessment is available on the Source Water Assessment & Protection Web page at
http://www.dep.state.pa.us/dep/deputate/watermgt/wc/Subjects/SrceProt/SourceAssessment/default.htm
Copies of the complete report are available for review at the PA DEP Northwestern Regional Office, Records Management Unit at 814-332-6899.

As part of the permitting process, extensive water quality analysis was completed on water from the Authority's well fields. The Water Authority controls a significant area around the well fields to prevent development and potential contamination. The Authority believes the well fields have a low risk of significant contamination.

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, 2023. 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.

Location 100 – Hershey Road

Location 101 – Rube Road well field

Location 103 – Moore Road wells 1 & 2

Location 106 – Moore Road well 3

***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.

***Not Required (NR)* –** These contaminants were not required to be monitored during this calendar year.

***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

SUMMIT TEST RESULTS Public Water System ID: 6250090								
Inorganic Contaminants								
Contaminant (Unit of measurement)	**Location**	**Sample Date**	**Violation Y/N**	**Level Detected**	**Range of Detection**	**MCLG**	**MCL**	**Source of Contamination**
Arsenic* (ppb)	101	6/16/21	N	2	2	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
	103	6/6/23	N	2	2	0	10	
	106	6/6/23	N	2	2	0	10	
Barium (ppm)	101	6/16/21	N	0.21	0.21	2		Erosion of natural deposits. Drilling wastes. Industrial discharges
	103	6/16/21	N	0.21	0.21			
	106	6/16/21	N	0.211	0.211			
Nickel (ppb)	101	6/16/2021	N	0.88	0.88	100	100	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits
Nitrate (ppm)	101	6/21/2022	N	0.74	(a)	10	10	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits
Manganese (ppb) (Secondary Contaminant)	106	3/15/2022	N	99	99	50	50	Erosion of natural deposits. Drilling wastes. Industrial discharges
Haloacetic Acids (HAA5) (ppb)		11/6/2023	N	15.9	3.06-29.2	(na)	60	Byproduct of disinfection
Trihalomethanes (THMS) (ppb)		11/6/2023	N	34.8	1.81-76.4	(na)	80	Byproduct of disinfection

Manganese is a naturally occurring mineral found in rocks, soil, groundwater and surface water. Manganese is necessary for proper nutrition and is part of a healthy diet but can have and undesirable discoloration and taste in water. The EPA and DEP have set an Secondary Maximum Contaminant Level (SMCL) for Manganese of 50 ppb. And ORSG or public health advisory at 300 ppb. Over a lifetime EPA recommends that people drink levels less than 300 ppb and short term levels over 1000 ppb due to concerns of possible neurological effects.

* Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

(a) Only one sample is required.
(na) Non-Applicable

Entry Point Disinfection Residual								
Contaminant	**Location**	**Minimum Disinfectant**	**Lowest Level**	**Range of Detections**	**Units**	**Sample Date**	**Violation Y/N**	**Source of Contamination**
Free Chlorine Residual	101*							Water additive used to control microbes
	103*							
	106	.93	.96	.96-1.09	ppm	1/3/23	N	

*These entry points were not in use during 2023.

Disinfection							
Contaminant (Unit of Measurement)	**Level Detected**	**Sample Month**	**Range of Detections**	**MCLG**	**MCL**	**Violation Y/N**	**Sources of Contamination**
Chlorine (Highest monthly average) (ppm)	1.12	Feb 2023	0.58-1.12	MRDLG=4	MRDLG=4	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	0.8	ppb	0	N	Corrosion of household plumbing
Copper	1.3	1.3	0.11	ppm	0	N	Corrosion of household plumbing

ERIE DETECTED SAMPLE RESULTS Public Water System ID: 6250028							
Inorganic Contaminants							
Contaminant (Unit of measurement)	**Location**	**Violation Y/N**	**Level Detected**	**Range**	**MCLG**	**MCL**	**Source of Contamination**
Aluminum (ppb)	WP	Y (2019)	92	ND-290	50-200	200	Erosion of natural deposits; Leaching fromrocks and soil
	CP	N	34				
	Dist	Y (2019)	96	ND-310			
Barium (ppm)	WP	N	0.019		2	2	Discharge of drilling wastes; discharge frommetal refineries; erosion of natural deposits
	CP	N	0.020				
Copper (ppm)	WP	N	0.0071	0.0032 - 0.0110	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
	CP	N	0.0015				
Fluoride (ppm) (a)	WP	N	0.56		2	2	Erosion of natural deposits; water additivewhich promotes stronger teeth; dischargefrom fertilizer and aluminum factories
	CP	N	0.46				
Iron (ppb)	Dist	N	25	ND-180	300	(na)	Erosion of natural deposits; corrosion of household plumbing
Manganese (ppb)	WP	N	0.63	ND-2.70	50	50	Erosion of natural deposits; discharge from metal refineries; runoff from agriculture
	Dist	N	2.7	ND-27.0	50	50	
Nitrate (ppm)	WP	N	0.53		10		Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Orthophosphate (ppm)	WP	N	0.50	0.20-0.72	(na)	(na)	Water additive used for corrosion control
	CP	N	0.55	0.47-0.63			
	Dist	N	0.73	0.46-2.19			
Sodium (ppm)	WP	N	13	10-15	(na)	(na)	Erosion of natural deposits; wastewater effluent; runoff from road salting
	CP	N	12				
	Dist	N	13	10-16			
Sulfate (ppm)	WP	N	20	19-20	250	(na)	Erosion of natural deposits; Leaching fromrocks and soil
	CP	N	20				
Zinc (ppb)	Dist	N	8.1	ND-15	(na)	(na)	Erosion of natural deposits; Discharge of mining wastes; discharge from metalrefineries

Synthetic Organic Compound (SOC)							
Contaminant (Unit of measurement)	**Location**	**Violation Y/N**	**Level Detected**	**Range**	**MCLG**	**MCL**	**Source of Contamination**
Dioxin (2,3,7,8-TCDD) (ppq)	CP	N	0.52	0.44-0.59	0	30	Emissions from waste incineration and other combustion; Discharge from chemical factories
Dalapon (ppb)	Dist	N	1.02		200	200	Runoff from herbicide used on rights of way
Di(2-ethylhexyl) phthalate (ppb)	Dist	N	3.07		0	6	Discharge from rubber and chemical factories
2,4- D (ppb)	CP	N	0.05	ND-0.139	70	70	Runoff from herbicide used on row crops
	Dist	N	0.14	0.112-0.118			
Ethylbenzene (ppb)	Dist	N	1.85	0.9-2.8	700	700	Discharge from petroleum factories
Xylenes (ppm)	Dist	N	0.0111	0.0059-0.0184	10	10	Discharge from petroleum factories; Discharge from chemical factories
Disinfection and Disinfection Byproducts							
Contaminant (Unit of measurement)	**Location**	**Violation Y/N**	**Level Detected**	**Range**	**MCLG**	**MCL**	**Source of Contamination**
Haloacetic Acids (ppb) (Highest Running Average)	Dist	N	25.2	3.8-34.2	(na)	60	Byproduct of drinking water disinfection
Total Trihalomethanes (ppb) (Highest Running Average)	WP	N	15.6	8.4-23.4	(na)	80	Byproduct of drinking water disinfection
	CP	N	9.4				
	Dist	N	36.0	10.1-109.0			
Chlorine (ppm) (Highest monthly average)	Dist	N	1.50	0.97-1.50	MRDLG = 4	MRDL= 4	Water additive used to control microbes
Radiological Contaminants							
Contaminant (Unit of measurement)	**Location**	**Violation Y/N**	**Level Detected**	**Range**	**MCLG**	**MCL**	**Source of Contamination**
Gross Beta (pCi/L) (b)	WP	N	5.8		0	50	Decay of natural and man-made deposits

Microbiological Contaminants

Turbidity

Contaminant	MCL	MCLG	Level Detected	Sample Date	Violation Y/N	Sources of Contamination
Turbidity (CFE) (ntu)	TT= 1 NTU for a single measurement (WP)	0	0.270	3/14/2023	N	Soil runoff
	TT= 95% of monthly samples < 0.15NTU (WP)	0	100.0%	March 2023	N	Soil runoff
	TT= 1 NTU for a single measurement (CP)	0	2.000	9/14/2023	N	Soil runoff
	TT= 95% of monthly samples < 0.3NTU (CP)	0	100.0%	September 2023	N	Soil runoff

Contaminant (Unit of measurement)	**Location**	**Violation Y/N**	**Level Detected**	**Range**	**MCLG**	**MCL**	**Source of Contamination**
Turbidity (CFE) (ntu)	WP	N	0.021	0.001-0.27	(na)	TT	Soil runoff
	CP	N	0.047	0.021-2.00	(na)		

Entry Point Disinfectant Residual								
Contaminant	**Location**	**Minimum Disinfectant**	**Lowest Level**	**Range of Detections**	**Units**	**Sample Date**	**Violation Y/N**	**Sources of Contamination**
Chlorine	WP	0.2	0.49	0.49-1.76	ppm	9/9/2023	N	Water additive used to controlmicrobes
	CP	0.2	0.33	0.33-1.64	ppm	9/13/2023	N	

Lead and Copper Study							
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	0.992	ppb	0 of 59	N	Corrosion of household plumbing systems; erosion of natural deposits
Copper	1.3	1.3	0.073	ppm	0 of 59	N	

Microbial					
Contaminant	**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	(na)	See detailed description under "Detected Contaminants Health Effects Language and Corrective Actions" section	N	Naturally present in the environment

Total Organic Carbon (TOC)							
Contaminant (Unit of measurement)	**Location**	**Violation Y/N**	**Level Detected**	**Range**	**MCLG**	**MCL**	**Source of Contamination**
SUVA (ppm)	WP	N	0.98	0.77-1.19	(na)	(na)	Test to determine TOC reactivity
	CP	N	0.96	0.91-1.02			
DOC (ppm)	WP	N	1.72	1.49-2.10	(na)	(na)	Test to determine TOC reactivity
	CP	N	1.86	1.64-2.01			
UV254 (cm^{-1})	WP	N	0.017	0.014-0.020	(na)	(na)	Test to determine TOC reactivity
	CP	N	0.018	0.017-0.020			

Contaminant	**Range of % Removal Required**	**Range of Percent Removal achieved**	**Number of quarters out of compliance**	**Violation Y/N**	**Sources of Contamination**
TOC	25% (CP only)	22.4 – 30.3%	0	N	Naturally present in theenvironment
		ACC used when below 25%	SUVA		

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

(b) EPA considers 50 pCi/L to be the level of concern for beta particles

(na) Not applicable

Violations:
During 2023, the Summit Township Water Authority did not incur any violations of the PA DEP Drinking Water Standards:

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 runoff, 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 byproducts 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 PA DEP prescribe regulations which limit the number of certain contaminants in water provided by public water systems. 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 Summit Township Water 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.

Other Information:
Fluoride - The northern portion of the Township (generally north of Robison Road) is served by water purchased from the Erie City Water Authority. The water supplied by the Erie City Water Authority contains fluoride, which is an additive to promote strong teeth. The southern portion of the Township and the Oliver Road area is served by well water, which contains a minimal trace of fluoride. Fluoride in groundwater occurs naturally as the water passes through minerals and rocks that contain fluoride. If you require additional information, please contact Brian Hiles at 814-864-2323 for specific service areas in the Township which have fluoride in the water supply.