Titusville Water Works

2017 ANNUAL DRINKING WATER QUALITY REPORT

PWSID #: 6200051

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 Titusville Water Works at 814-827-5300 Ext. 319. We want you to be informed about your water supply.

SOURCE OF WATER

Our water source is 10 interconnected wells located at the Titusville Water Works property / 220 Oil Creek Drive, Titusville, PA 16354.

> 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, 2017. 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.

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)

ppt = parts per trillion, or nanograms per liter

ppq = parts per quadrillion, or picograms 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**
Barium	2	2	0.057	N/A	ppm	10/13/2015	N	Discharge of drilling wastes, metal refineries natural deposits
Nitrate	10	10	0.709	N/A	ppm	06/20/2017	N	Runoff from fertilizer
Trihalomethanes (TTHM)	80	N/A	4.12	N/A	ppb	08/17/2017	N	Byproduct of drinking water chlorination
Haloacetic Acids (HAA5)	60	N/A	0	N/A	ppb	08/17/2017	N	Byproduct of drinking water chlorination
Chlorine (Distribution)	MRDL 4	MRDLG 4	0.60 (June)	0.40-0.60	ppm	2017	N	Water additive used to control microbes
Radium-228	5	0	1.09	N/A	pCi/L	07/15/2014	N	Runoff/discharge of metal deposits
2,3,7,8,TCDD (Dioxin)	30	0	0	N/A	MCL	2017	N	Emmisions from waste incineration and other combustible;discharge from chemical factories

Entry Point Disinfectant Residual							
Contaminant	**Minimum Disinfectant Residual**	**Lowest Level Detected**	**Range of Detections**	**Units**	**Lowest Sample Date**	**Violation Y/N**	**Sources of Contamination**
Chlorine	0.40	0.20*	0.20-0.77	ppm	04/19/2017	N	Water additive used to control microbes.

*** Although this Lowest Level Detected is below the Minimum Disinfectant Residual, the required level was reached within the required 4-hour time frame.**

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 (2016)	15	0	0*	ppb	0 out of 20	N	Corrosion of household plumbing.
Copper (2016)	1.3	1.3	0.146*	ppm	0 out of 20	N	Corrosion of household plumbing.

*The data for lead and copper testing for the year 2016 was determined to be invalid due to an error made by the laboratory responsible for the analysis.

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. Titusville Water Works 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*.

Microbial (related to 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 *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 (6/6/17)	N*	Human and animal fecal waste.

*Although we have detected *E. coli*, we are not in violation of the *E. coli* MCL.

VIOLATIONS: We received a Monitoring/Reporting Violation for the 2, 3, 7, 8-TCDD (Dioxin) sample for the date of 10/06/2017. The violation was due to the Laboratory reporting the sample results after the required due date to the PA Department of Environmental Protection.

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).