

2017 ANNUAL DRINKING WATER QUALITY REPORT

PWSID #: 5100079

SLIPPERY ROCK MUNICIPAL AUTHORITY

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. We encourage you to review this report. If you have any questions about this report or concerning your water utility, please call our customer service representatives at 724-794-6552, M-F between the hours of 8:30 am and 4:00 pm. We want you to be informed about your water supply. If you want to learn more, please attend any of our regularly scheduled public meetings held on the second Wednesday of each month at 6:30 pm at the Authority Office, 116 Crestview Road, Slippery Rock, PA.

SOURCE(S) OF WATER:

Well #3, Well #4, and SRMA Well 5, all with Source Code: Ground.

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.

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)

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

pCi/L = picocuries per liter (a measure of radioactivity)

ppq = parts per quadrillion, or picograms per liter

ppb = parts per billion, or micrograms per liter (µg/L)

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	.89	0.89-1.51	ppm	2017	N	Water additive used to control microbes
Barium	2	2	0.791	2 Results	ppm	2015	N	Erosion of natural deposits
Cadmium (IOC)	5	5	.0002	1 Result	ppm	2015	N	Corrosion of galvanized pipes; Erosion of natural deposits.
Fluoride ¹	2	2	0.405	2 Result	ppm	2015	N	Erosion of natural deposits
Haloacetic acids five (HAA5)	60	NA	6.29	2 Result	ppb	2017	N	By-product of drinking water chlorination
Trihalomethanes (TTHMT)	80	NA	26.2	2 Result	ppb	2017	N	By-product of drinking water chlorination
Combined Radium	5	NA	1.02	0.00-1.02	pCi/L	2017	N	Erosion of natural deposits

¹EPA'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
Chlorine (Site 101)	0.40	0.00 ²	0.00-2.45	ppm	2017	N	Water additive used to control microbes.
Chlorine (Site 102)	0.40	0.03 ²	0.03-2.05	ppm	2017	N	Water additive used to control microbes.

²Entry point disinfectant residual chlorine shows limits below the required .4 minimum.

- The treatment plant is permitted to run below the minimum for a period of not more than 4 hours; and
- The treatment plant never ran below .4 for more than 4 hours.

Lead and Copper							
Contaminant	Action Level (AL)	MCLG	90 th Percentile Value	Units	# of Sites Above AL of Total Sites	Violation Y/N	Sources of Contamination
Lead	15	0	0.00	ppb	0 of 30	N	Corrosion of household plumbing.
Copper	1.3	1.3	0.463	ppm	0 of 30	N	Corrosion of household plumbing.

Microbial (related to Assessments/Corrective Actions regarding TC positive results)					
Contaminants	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	N/A	See detailed description under "Detected Contaminants Health Effects Language and Corrective Actions" section. ³	N	Naturally present in the environment.

DETECTED CONTAMINANTS HEALTH EFFECTS LANGUAGE AND CORRECTIVE ACTIONS:

³Level 1 Assessment of sample site 808 was conducted on 10/20/2017; after positive coliform results were detected.

- The sample site had acceptable chlorine residual at the time of sampling.
- The positive coliform results were due to the operator not following proper sampling procedures and not removing the faucet aerator prior to sampling.

OTHER VIOLATIONS:

Contaminant	Contaminant ID	Violation Type	Violation ID	Entry Point Location	Period Begin Date	Fiscal Year
ALPHA/EXCL. RADON & URANIUM	4000	MONITORING – REPORTING-03	18540	101	1/1/2017	2017
COMBINED URANIUM	4006	MONITORING – REPORTING-03	18541	101	1/1/2017	2017
RADIUM-226	4020	MONITORING – REPORTING-03	18542	101	1/1/2017	2017
RADIUM-228	4030	MONITORING – REPORTING-03	18543	101	1/1/2017	2017
ENDRIN (SOC)	2005	MONITORING – REPORTING-03	36166	101	7/1/2017	2017
LINDANE (SOC)	2010	MONITORING – REPORTING-03	36167	101	7/1/2017	2017
METHOXYCHLOR (SOC)	2015	MONITORING – REPORTING-03	36168	101	7/1/2017	2017
DI (2-ETHYLHEXYL) ADIPATE (SOC)	2035	MONITORING – REPORTING-03	36169	101	7/1/2017	2017
SIMAZINE (SOC)	2037	MONITORING – REPORTING-03	36170	101	7/1/2017	2017
DI (2-ETHYLHEXYL) PHTHALATE (SOC)	2039	MONITORING – REPORTING-03	36171	101	7/1/2017	2017
HEXACHLOROCYCLOPENTADIENE (SOC)	2042	MONITORING – REPORTING-03	36172	101	7/1/2017	2017
ATRAZINE (SOC)	2050	MONITORING – REPORTING-03	36173	101	7/1/2017	2017
ALACHLOR (SOC)	2051	MONITORING – REPORTING-03	36174	101	7/1/2017	2017
2,3,7,8-TCDD (DIOXIN) (SOC)	2063	MONITORING – REPORTING-03	36175	101	7/1/2017	2017
HEPTACHLOR (SOC)	2065	MONITORING – REPORTING-03	36176	101	7/1/2017	2017
HEPTACHLOR EPOXIDE (SOC)	2067	MONITORING – REPORTING-03	36177	101	7/1/2017	2017
HEXACHLOROBENZENE (SOC)	2274	MONITORING – REPORTING-03	36178	101	7/1/2017	2017
BENZO(A)PYRENE (SOC)	2306	MONITORING – REPORTING-03	36179	101	7/1/2017	2017
DI (2-ETHYLHEXYL) PHTHALATE (SOC)	2039	MONITORING – REPORTING-03	36181	102	1/1/2017	2017
2,3,7,8-TCDD (DIOXIN) (SOC)	2063	MONITORING – REPORTING-03	36182	102	1/1/2017	2017
PCBS (SOC)	2383	MONITORING – REPORTING-03	36183	102	1/1/2017	2017

Violations for location 101:

- Violations 18540 - 18543; samples were taken on time but results were not reported on time.
- Violations 36166 - 36179; samples were taken on time and submitted to the lab, but the incorrect amount of preservative was added to the sample. By the time the samples were retaken the sampling period had expired making them late for sampling and reporting.

Violations for location 102:

- Violations 36181 - 36183; samples were taken on time but results were not reported on time.

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. Slippery Rock 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>.

- In 2016, thirty (30) sites were sampled for Lead; all sites tested non-detectable for Lead.
- Next required sampling for Lead is 2019.

OTHER INFORMATION:

Consumers should be aware that our sodium level is 144 mg/L. Persons on a sodium restricted diet should share this information with their physician.

Landlords, apartment managers, businesses, schools, and others are encouraged to share this Annual Drinking Water Quality Report with all water consumers at their respective locations. We thank you for your cooperation in distributing this important information.