

2019 ANNUAL DRINKING WATER QUALITY REPORT

PWSID #: 2400136

NAME: Sandy Run Association

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 Freeland Municipal Authority staff at 570-636-1733. 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 third Wednesday of each month in the conference room 6p.m. at 711 Birkbeck St. Freeland, PA 18224.

SOURCE(S) OF WATER:

Our water source(s) is/are: drawn from well #1 and it is a permanent ground water supply. Well #1 draws water from the Buck Mountain/Mauch Chunk Aquifer.

A Source Water Assessment of our source(s) was completed by the PA Department of Environmental Protection (Pa. DEP). A summary report of the Assessment is available on the Source Water Assessment Summary Reports eLibrary web page: www.elibrary.dep.state.pa.us/dsweb/View/Collection-10045. Complete reports were distributed to municipalities, water supplier, local planning agencies and PADEP offices. Copies of the complete report are available for review at the Pa. DEP Northeast Regional Office, Records Management Unit at (570) 826-2511.

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, 2019. 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 ($\mu\text{g/L}$)

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 |
| Nitrate | 10 | 10 | 0.2 | 0 - 9 | mg/L | 2/12/19 | N | Local use of fertilizers |
| Di (2-ethylhexyl phthalate) | 0.006 | 0.006 | 0.00741 | 0 - 0.00741 | mg/L | 5/7/19 | N | Plastics |
| Haloacetic Acids (5) | 0.060 | N/A | 0.00135 | N/A | mg/L | 9/3/19 | N | By-product of drinking water chlorination |
| Chlorine | 4 | 4 | 0.87 | 0.45 - 1.3 | mg/L | 2019 | N | Water additive used to control microbes |
| Trihalomethanes | 0.080 | 0.080 | 0.0074 | N/A | mg/L | 9/3/19 | N | Byproduct of drinking water chlorination |
| | | | | | | | | |
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| | | | | | | | | |

*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 |
| Chlorine | 0.40 | 0.45 | 0.45 - 1.30 | mg/L | 5/21/19 | 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 | 0.015 | 0 | 0 | mg/L | 0 out of 5 | N | Corrosion of household plumbing. |
| Copper | 1.3 | 1.3 | 0.465 | mg/L | 0 out of 5 | 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 | N | Naturally present in the environment. |

| Microbial (related to E. coli) | | | | | |
|---------------------------------------|---|-------------|--|----------------------|---------------------------------|
| Contaminants | MCL | MCLG | Positive Sample(s) | Violation Y/N | Sources of Contamination |
| <i>E. coli</i> | Routine and repeat samples are total coliform-positive and either is <i>E. 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 | N | Human and animal fecal waste. |
| Contaminants | TT | MCLG | Assessments/ Corrective Actions | Violation Y/N | Sources of Contamination |
| <i>E. coli</i> | 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 | N | Human and animal fecal waste. |

| Raw Source Water Microbial | | | | | |
|-----------------------------------|-------------|------------------------------------|--------------|----------------------|---------------------------------|
| Contaminants | MCLG | Total # of Positive Samples | Dates | Violation Y/N | Sources of Contamination |
| <i>E. coli</i> | 0 | 0 | N/A | N | Human and animal fecal waste. |

DETECTED CONTAMINANTS HEALTH EFFECTS LANGUAGE AND CORRECTIVE ACTIONS:

Di (2-ethylhexyl) phthalate

Some people who drink water containing Di (2-ethylhexyl) phthalate well in excess of the MCL over many years may have problems with their liver, or experience reproductive difficulties, and may have an increased risk of getting cancer. Regularly scheduled testing for Di (2-ethylhexyl) phthalate occurred on May 7, 2019 and results indicated levels over the MCL (6 ppb). The violation lasted until October 2019. No violation ID # was generated for this incident by PA DEP. Check samples were taken on September 3 and October 22, 2019 and results showed 0 ppb (non-detect) for the contaminant. Therefore, compliance was achieved, and the violation ended.

OTHER VIOLATIONS:

The following includes Public Notice of Violations indicating that we failed to comply with the monitoring requirements. Please be aware that no emergency exists. Your drinking water is safe, and you are receiving this notice within the required 1-year time frame for Tier 3 public notices per the guidelines provided by PA Department of Environmental Protection.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. On September 15, 2019, we did not monitor or test for Haloacetic Acid (Five) (HAA5) and Trihalomethanes (TTHM), and therefore cannot be sure of the quality of your drinking water during that time. Samples were taken ahead of time outside the allotted time frame of +/- 3 days of September 15, 2019. Hence, there was a violation for failure to monitor HAA5 and TTHM. The samples were taken too early on September 3, 2019 resulting in the violation. The potential health effects caused by HAA5 have been shown to affect the liver, kidneys, eyes, nervous system, and reproductive system. However, test results indicated safe levels of HAA5 in your water. Therefore, compliance was achieved, and the violation ended. The HAA5 violation ID # is 36120. The potential negative health effects of TTHM's include possibly cancer and adverse reproductive outcomes. However, the results of the tested samples indicate safe levels TTHM. Therefore, compliance was achieved, and the violation ended. The TTHM violation ID # is 36121. The results of these tests (HAA5 and TTHM) are included within this report under the contaminants information section.

There were also paperwork violations on June 19, 2019 and July 24, 2019 due to failure to report chlorine disinfectant residuals on time. The residuals were reported; therefore, compliance was achieved. The violation ID # for June is 22572 and for July is 25589.

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. Freeland 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>.

OTHER INFORMATION:

Chlorodibromomethane (THM) was also detected in our sample results at a level of 0.0013mg/L. Chlorobromomethane (THM) is also a by-product of drinking water chlorination. The levels detected are not over the MCL. Results indicate safe level and therefore there is no violation.