

2020 Annual Drinking Water Quality Report

Port Royal Municipal Authority

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PWSID NO. 4340010

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.)

We're very pleased to provide you with the year's Annual Drinking Water Report for 2020. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is and always has been, to provide you with a safe and dependable supply of drinking water. If you have any questions about this report or your water and wastewater utilities, please contact Duane Hart at 717-527-2711. Office hours are Tuesday through Thursday, 9:00 am to 3:00 pm. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held every third Wednesday of the month at 7:00 pm at the Authority Office on 8th Street. Proceed to the end of 8th Street and turn right into the Parking Lot.

SOURCES OF WATER:

Our water sources consist of seven groundwater wells. Wells #1, #3, #4, #5, #6, #7 and #8 (well #2 was abandoned) are located south of Old Port along the Tuscarora Mountain. These wells are protected by a 99-acre watershed owned by the Port Royal Municipal Authority. The Port Royal Municipal Authority has not purchased water from another supplier in the last few years.

We have a source water protection plan available at our office that provides more information such as potential sources of contamination.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as person with cancer undergoing chemotherapy, person 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 the appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

MONITORING YOUR WATER:

Port Royal Municipal Authority routinely monitors for constituents in your drinking water, according to federal and state laws. The following tables show the results of monitoring for the period of January 1st to December 31st, 2020. The State allows us to monitor for some contaminants less than once per year because the concentrations of the 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.

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or man-made. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials. All drinking water, including bottled water, may be reasonably expected to contain small amounts of some contaminants. The presence of contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

DEFINITIONS:

In these tables you will find many terms and abbreviations that you may not be familiar with. To help you better understand these terms, the following definitions are provided:

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.

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

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

Mrem/year = millirems per year (a measure of radiation absorbed by the body)

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

| <i>Entry Point Disinfectant Residual</i> | | | | | | | | |
|--|--|-----------------------|---------------------|-------|-------------|--------------------------------------|---------------|---|
| Contaminant | Minimum Disinfectant Residual Required | Lowest Level Detected | Range of Detections | Units | Location ID | Sample Date Of Lowest Level Detected | Violation Y/N | Sources of Contamination |
| Free Chlorine | 0.4 | 0.41 | 0.41 – 1.81 | ppm | 101 | 01/07/19 | N | Water additive used to control microbes |
| | | | | | | | | |

| <i>Lead and Copper</i> | | | | | | | | |
|------------------------|-------------------|------|-----------------------------------|-------|------------------------------------|-------------|---------------|--------------------------|
| Contaminant | Action Level (AL) | MCLG | 90 th Percentile Value | Units | # of Sites Above AL of Total Sites | Sample Date | Violation Y/N | Sources of Contamination |
| | | | | | | | | |

| Contaminant | MCL | MCLG | Average | | | Sample Date | Violation | Sources of |
|-------------|-----|------|---------|--|--|-------------|-----------|------------|
| | | | | | | | | |

| | | | Value | Range of Detections | Units | | Y/N | Contamination |
|-----------------------------|-------|-------|--------|------------------------|-------|----------|-----|---|
| Nitrate | 10 | 1.5 | 0 | 0 | mg/l | 9/15/20 | N | Sign of surface water contamination into ground water sources |
| Nitrite | 1 | | 0 | 0 | mg/l | 9/15/20 | N | Sign of surface water contamination into ground water sources |
| Bromodichloromethane | 80 | 80 | 0 | 0 | ppb | 9/12/19 | N | By-product of drinking water chlorination |
| Bromoform (THHM) | 80 | 80 | 0 | 0 | ppb | 9/12/19 | N | By-product of drinking water chlorination |
| Chloroform | 80 | 80 | 0 | 0 | ppb | 9/12/19 | N | By-product of drinking water chlorination |
| Chlorodibromomethane (THHM) | 80 | 80 | 0 | 0 | ppb | 9/12/19 | N | By-product of drinking water chlorination |
| | | | | | | | | |
| Cyanide | 0.2 | 0.2 | 0 | 0 | mg/l | 06/05/18 | N | Industrial waste product, can be in raw water |
| Mercury | 0.002 | 0.002 | 0 | 0 | mg/l | 06/05/18 | N | Industrial waste product, can be in raw water |
| Antimony | 0.006 | 0.006 | 0 | 0 | mg/l | 06/05/18 | N | Industrial waste product, can be in raw water |
| Arsenic | 0.01 | 0.01 | 0 | 0 | mg/l | 06/05/18 | N | Industrial waste product, can be in raw water |
| Thallium | 0.002 | 0.002 | 0 | 0 | mg/l | 06/05/18 | N | Industrial waste product, can be in raw water |
| Barium | 2 | 2 | 0.0369 | 0.0 - 0.0369 | mg/l | 06/05/18 | N | Industrial waste product, can be in raw water |
| Beryllium | 0.004 | 0.004 | 0 | 0 | mg/l | 06/05/18 | N | Industrial waste product, can be in raw water |
| Cadmium | 0.005 | 0.005 | 0 | 0 | mg/l | 06/05/18 | N | Industrial waste product, can be in raw water |
| Chromium | 0.1 | 0.1 | 0 | 0 | mg/l | 06/05/18 | N | Industrial waste product, can be in raw water |
| Nickel | 0.1 | 0.1 | 0 | 0 | mg/l | 06/05/18 | N | Naturally occurring, can be within raw water |
| Fluoride | 2 | 2 | 0 | 0 | mg/l | 06/05/18 | N | Industrial waste product, can be in raw water |
| Selenium | .05 | .05 | 0 | 0 | mg/l | 06/05/18 | N | Industrial waste product, can be in raw water |
| Endrin | .002 | .002 | 0 | 0 | mg/l | 06/05/18 | N | Industrial waste product, can be in raw water |
| Lindane | .0002 | .0002 | 0 | 0 | mg/l | 06/05/18 | N | Industrial waste product, can be in raw water |

Violations:

During 2020, the Water Authority was required to report certain specific disinfection byproducts of the Chlorination addition used to disinfect the drinking water. When notified of these failures, the Water Authority immediately corrected this oversight and took the necessary samples. These violations were:

March 18, 2020; sample reported late

November 27, 2020; sample reported late

Both violations were corrected as soon as time allowed

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 salt 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 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* (1-800-426-4791).

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 material soldering components associated with service lines and home plumbing. Port Royal Municipal Authority is responsible for providing high quality drinking water, but cannot control the variety of material used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing you 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:

Thank you for allowing us to continue to provide your family with clean, quality water this year. In order to maintain a safe and dependable water supply, we sometimes need to make improvement that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for your understanding. Please call our office if you have any questions.