Perry Park 2019 Water Quality Water & Sanitation District Consumer Confidence Report

Public Water System ID: CO0118045

We are pleased to present to you this year's Perry Park Water and Sanitation District (PPWSD) water quality report. Our constant goal is to provide you with a safe and dependable supply of drinking water. Please contact Diana Miller, District Manager at 303-681-2050 or Will Parker, Operations at 303-681-2253 with any questions or for public participation opportunities that may affect water quality.

What is a Consumer Confidence Report (CCR)?

This CCR is our annual water quality report that all community water systems are required to provide to their customers. It is based on the 1996 Amendments to the Environmental Protection Agency's (EPA) Safe Drinking Water Act and the right to know provisions of that Act. As a customer of the Perry Park Water and Sanitation District (PPWSD), it gives you the opportunity to review your water quality annually. It also is provided to help you make informed choices about the water you drink. The report lets you know what, if any, contaminants are in the drinking water, and how they may affect your 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.

What does the water quality report (CCR) reveal?

The drinking water provided to the residents of Perry Park has met and/or exceeded the EPA's strict water quality drinking standards. Water quality is important to us, which is why Perry Park Water and Sanitation District (PPWSD) employs some of the most qualified, highly credentialed water treatment operators in the State of Colorado. Testing and treating the drinking water is ongoing. At least twice a year we test for metals and perform ten bacteriological samples per month. We also test water quality at the faucets within a number of Perry Park homes on a scheduled basis.

You can call us at the main office during business hours at 303-681-2050, email us at dmiller_ppwsd@comcast.net, or stop by 5676 West Red Rock Drive and speak to us in person.

From Your Board

All of us serving on the Perry Park Water and Sanitation District Board are property owners elected by the registered voters living in Perry Park. Along with our management team, we are all dedicated to helping ensure the quality of our drinking water, reliability of wastewater services, protecting the environment and providing a sustainable water supply.

LIST OF DEFINITIONS

Maximum Contaminant Level (MCL) - The highest level of a contaminant allowed in drinking water.

Treatment Technique (TT) – A required process intended to reduce the level of a contaminant in drinking water.

Health-Based – A violation of either a MCL or TT.

Non-Health-Based – A violation that is not a MCL or TT.

Action Level (AL) - The concentration of a contaminant which, if exceeded, triggers treatment and other regulatory requirements.

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 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 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.

Violation (No Abbreviation) – Failure to meet a Colorado Primary Drinking Water Regulation.

Formal Enforcement Action (No Abbreviation) – Escalated action taken by the State (due to the risk to public health, or number or severity of violations) to bring a non-compliant water system back into compliance.

Variance and Exemptions (V/E) – Department permission not to meet a MCL or treatment technique under certain conditions.

Gross Alpha (No Abbreviation) - Gross alpha particle activity compliance value. It includes radium-226, but excludes radon 222, and uranium

Picocuries per liter (pCi/L) – Measure of the radioactivity in water.

Nephelometric Turbidity Unit (NTU) – Measure of the clarity or cloudiness of water. Turbidity in excess of 5 NTU is just noticeable to the typical person.

Compliance Value (No Abbreviation) – Single or calculated value used to determine if regulatory contaminant level (e.g. MCL) is met. Examples of calculated values are the 90th Percentile, Running Annual Average (RAA) and Locational Running Annual Average (LRAA).

Average (x-bar) - Typical value.

Range (R) - Lowest value to the highest value.

Sample Size (n) - Number or count of values (i.e. number of water samples collected).

Parts per million = Milligrams per liter (ppm = mg/L) – One part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion = Micrograms per liter (ppb = ug/L) – One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Not Applicable (N/A) - Does not apply or not available.

Level 1 Assessment – 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 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.

Disinfectants Sampled in the Distribution System

TT Requirement: At least 95% of samples per period (month or quarter) must be at least 0.2 ppm OR If sample size is less than 40 no more than 1 sample is below 0.2 ppm Typical Sources: Water additive used to control microbes

Contaminant Name	Time Period	Results	Number of Samples Below Level	Sample Size	TT Violation	MRDL
Chlorine	December 2018	Lowest period percentage of samples meeting TT requirement: 100%	0	4	No	4.0 ppm

Lead and Copper Sampled in the Distribution System								
Contaminant Name	Time Period	90th Percentile	Sample Size	Unit of Measure	90th Percentile AL	Sample Sites Above AL	90th Percentile AL Exceedance	Typical Sources
Copper	06/20/2018 to 06/22/2018	0.16	20	ppm	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	06/20/2018 to 06/22/2018	1	20	ppb	15	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

Disinfection Byproducts Sampled in the Distribution Syste

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Name	Year	Average	Range Low-High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources		
Total Haloacetic Acids (HAA5)	2018	1.9	0 to 5.8	8	ppb	60	N/A	No	Byproduct of drinking water disinfection		
Total Trihalomethanes (TTHM)	2018	9.47	0 to 17.4	8	ppb	80	N/A	No	Byproduct of drinking water disinfection		

Disinfectants Sampled at the Entry Point to the Distribution System (Chlorine/Chloramine Row is Optional, Chlorine Dioxide Row is Required)										
Disinfectant Name Year Number of Samples Above or Below Level Sample Size TT/MRDL Requirement TT/MRDL Violation Typical Sources										
Chlorine/Chloramine	2018	0	1470	TT = No more than 4 hours with sample below 0.5 MG/L	No	Water additive used to control microbes				

Summary of Turbidity Sampled at the Entry Point to the Distribution System										
Contaminant Name	Sample Date	Level Found	TT Requirement	TT Violation	Typical Sources					
Turbidity	Date/Month: Jul	Highest single measurement: 0.5 NTU	Maximum 1 NTU for any single measurement	No	Soil Runoff					
Turbidity	Month: Jul	Lowest monthly percentage of samples meeting TT requirement for our technology: 97%	In any month, at least 95% of samples must be less than 0.3 NTU	No	Soil Runoff					

Radionuclides Sampled at the Entry Point to the Distribution System										
Contaminant Name Year Average Range Low-High Sample Size Unit of Measure MCL MCLG MCL Violation Typical Sources										
Gross Alpha	2016	3.4	2.64 to 4.3	3	pCi/L	15	0	No	Erosion of natural deposits	
Combined Radium	2018	4.75	3.3 to 5.6	4	pCi/L	5	0	No	Erosion of natural deposits	
Combined Uranium	2016	3.23	0.2 to 9.2	3	ppb	30	0	No	Erosion of natural deposits	

Inorganic Contan	norganic Contaminants Sampled at the Entry Point to the Distribution System										
Contaminant Name	Year Average MCI MC							MCL Violation	Typical Sources		
Barium	2018	0.12	0.09 to 0.15	2	ppm	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits		
Fluoride	2018	1.33	1.06 to 1.6	2	ppm	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories		
Nitrate	2018	0.23	0 to 0.5	3	ppm	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits		
Selenium	2018	1	0 to 2	2	ppb	50	50	No	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines		

Secondary Contamin	Secondary Contaminants										
**Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin, or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water.											
Contaminant Name	Contaminant Name Year Average Range Low-High Sample Size Unit of Measure Secondary Standard										
Sodium	2018	18.45	14.3 to 22.6	2	ppm	N/A					

Violations, Significant Deficiencies, Backflow/Cross-Connection, and Formal Enforcement Actions

Violations					
Name	Category	Time Period	Health Effects	Compliance Value	TT Level or MCL
Turbidity	EQUIPMENT VERIFICATION OR CALIBRATION - NON-HEALTH-BASED - R532	12/20/2018 - 02/04/2019	N/A	N/A	N/A
	Ado	ditional Violation Information			

*Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail

Explanation of the violation(s), the steps taken to resolve them, and the anticipated resolved date:

The corrective action taken to resolve the above mentioned turbidity violation was to implement a quarterly calibration procedure and incorporate it into the daily log sheets. This insures the completion and verification of the calibration. The daily log sheets are kept at the water treatment plant and reviewed daily. The turbidimeter calibration will be completed to the manufacturer's requirements

Detected Contaminants

Perry Park Water and Sanitation District (PPWSD) routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table(s) show all detections found in the period of January 1 to December 31, 2018 unless otherwise noted. The State of Colorado requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Therefore, some of our data, though representative, may be more than one year old. Violations and Formal Enforcement Actions, if any, are reported in the next section of this report.

Note: Only detected contaminants sampled within the last 5 years appear in this report. If no tables appear in this section then no contaminants were detected in the last round of monitoring.

Lead in Drinking Water

If present, elevated levels of lead can cause serious health problems (especially for pregnant women and young children). It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home's plumbing. If you are concerned about lead in your water, you may wish to have your water tested. 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. Additional information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at http://water.epa.gov/ drink/info/lead.

Backflow Prevention

An irrigation permit is required for all new irrigation and landscape designs. Backflow prevention devices must be certified tested with results being sent to ppwsd@comcast.net when installed and annually thereafter. That's because we want to keep the water safe and flowing only one way.

Capital Improvements

The focus for 2019 will be increasing the treatment capacity at the Sageport Water Treatment Plant and increasing the well pumping capacity going into the Sageport Water Treatment Plant. We have successfully replaced the filter media already this year, improving the quality of the water flowing through the filters by removing iron and manganese.

YOU HAVE A VOICE

All of our monthly meetings are open to the public and your input is always welcome.



EMAIL

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GENERAL INFORMATION

All 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 the 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) or by visiting <u>http://water.epa.gov/drink/contaminants</u>.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and microbiological contaminants call the EPA Safe Drinking Water Hotline at (1-800-426-4791).

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: viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants: salts and metals, which can be naturallyoccurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides:** may come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses.
- **Radioactive contaminants:** can be naturally occurring or be the result of oil and gas production and mining activities.
- Organic chemical contaminants: including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.

In order to ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.



Source Water Assessment and Protection (SWAP)

The Colorado Department of Public Health and Environment has provided us with a Source Water Assessment Report for our water supply. For general information or to obtain a copy of the report please visit www.colorado.gov/cdphe/ccr. The report is located under "Guidance: Source Water Assessment Reports". Search the table using 118045, PERRY PARK WSD, or by contacting Diana Miller at 303-681-2050 or Will Parker at 303-681-2253. The Source Water Assessment Report provides a screening-level evaluation of potential contamination that could occur. It does not mean that the contamination *has or will* occur. We can use this information to evaluate the need to improve our current water treatment capabilities and prepare for future contamination threats. This can help us ensure that quality finished water is delivered to your homes. In addition, the source water assessment results provide a starting point for developing a source water protection plan. Potential sources of contamination in our source water area are listed on the next page.

Please contact us to learn more about what you can do to help protect your drinking water sources, any questions about the Drinking Water Quality Report, to learn more about our system, or to attend scheduled public meetings. We want you, our valued customers, to be informed about the services we provide and the quality water we deliver to you every day.



We are pleased to present this 2019 Water Quality Report (CCR) that reveals our water quality continues to meet and/or exceed all the EPA's strict water quality standards.



	Our Water Sources										
Source	Source Type Water Type		Potential Source(s) of Contamination								
Arapahoe #1 School Well, Emergency Fire Use	Well	Groundwater									
Arapahoe #2 Well	Well	Groundwater									
Arapahoe #3 Well	Well	Groundwater									
Arapahoe #4 Well, AKA Sageport Well	Well	Groundwater	Other facilities, Commercial/Industrial Transportation, Row								
Dakota #1 Well	Well	Groundwater	Crops, Pasture Hay,								
Denver #4 Well	Well	Groundwater	Deciduous Forest, Evergreen Forest and								
Glen Grove Well	Well	Groundwater	Road Miles								
Grant Ditch Well	Well	Groundwater									
West Plum #1 Well	Well	Groundwater									
West Plum #2 Well	Well	Groundwater									