

2018 Consumer Confidence Report

Water System Name:	Park Heights Mutual Water Co.	Report Date:	02/20/19
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We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2018 and may include earlier monitoring data.

**Este informe contiene información muy importante sobre su agua para beber.
Favor de comunicarse Park Heights Mutual Water Co. a (209) 765-0162 para asistirlo en español.**

Type of water source(s) in use:	Groundwater Wells		
Name & general location of source(s):	Arrowwood Ave Well and Park Ridge Ave Well - Riverbank, CA		
Drinking Water Source Assessment information:	Completed in June of 2002 - see last page		
Time and place of regularly scheduled board meetings for public participation:	None		
For more information, contact:	Neil Carnes	Phone:	(209) 765-0162

TERMS USED IN THIS REPORT

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

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 are set by the U.S. Environmental Protection Agency (USEPA).

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

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.

Primary Drinking Water Standards (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

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

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.

Variances and Exemptions: State Board permission to exceed an MCL or not comply with a treatment technique under certain conditions.

ND: not detectable at testing limit

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

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

ppt: parts per trillion or nanograms per liter (ng/L)

pCi/L: picocuries per liter (a measure of radiation)

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, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

- *Inorganic contaminants*, such as salts and metals, that 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*, that 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, that are by-products of industrial and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- *Radioactive contaminants*, that 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, the USEPA and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Tables 1, 2, 3, 4, and 5 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

Microbiological Contaminants	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria (State Total Coliform Rule)	(In a mo.) 0	0	1 positive monthly sample	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i> (State Total Coliform Rule)	(In the year) 0	0	A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or <i>E. coli</i> positive	0	Human and animal fecal waste
<i>E. coli</i> (Federal Revised Total Coliform Rule)	(In the year) 0	0	(a)	0	Human and animal fecal waste

(a) 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*.

TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper (and reporting units)	Sample Date	No. of Samples Collected	90 th Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	08/19/18 to 08/22/18	5	< 5	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	08/19/18 to 08/22/18	5	0.08	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituent (and reporting units)	Sample Date	Average Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	2016 - 2017	53	47 - 59	None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	2016 - 2017	248	240 - 256	None	None	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

*Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided later in this report.

TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Average Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Nitrate as Nitrogen (ppm)	2018	2	0.4 - 3	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Gross Alpha (pCi/l)	2011 - 2017	7	4 - 10	15	0	Erosion of natural deposits
Uranium (pCi/l)	2011-2012	8	5 - 9	20	N/A	Erosion of natural deposits
Barium (ppm)	2016-2017	0.2	0.2 - 0.2	1	2	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits

TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Average Level Detected	Range of Detections	SMCL	PHG (MCLG)	Typical Source of Contaminant
Total Dissolved Solids (ppm)	2016 - 2017	455	420 - 491	1000	N/A	Runoff/leaching from natural deposits
Specific Conductance (umho/cm)	2016 - 2017	763	700 - 826	1600	N/A	Substances that form ions when in water; seawater influence
Chloride (ppm)	2016 - 2017	80	76 - 85	500	N/A	Runoff/leaching from natural deposits; seawater influence
Sulfate (ppm)	2016 - 2017	36	34 - 36	500	N/A	Runoff/leaching from natural deposits; industrial wastes
Turbidity (NTU)	2016 - 2017	0.5	0.2 - 0.8	5	N/A	Soil runoff
Color (unit)	2016 - 2017	< 5	< 5 - 5	15	N/A	Naturally-occurring organic materials
Iron (ppb)	2016 - 2017	< 100	< 100 - 130	300	N/A	Leaching from natural deposits; industrial wastes
Zinc (ppm)	2016 - 2017	0.2	< 0.1 - 0.4	5	N/A	Runoff/leaching from natural deposits; industrial wastes

*Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided on the next page.

Additional General Information on Drinking Water

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 USEPA's Safe Drinking Water Hotline (1-800-426-4791).

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. USEPA/Centers for Disease Control (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.

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. Park Heights Mutual Water Company 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>.

Vulnerability Assessment Summary

A source water assessment was conducted for the Arrowwood East Well and the Park Ridge West Well of the Park Heights Mutual Water Company water system in June of 2002. The sources are considered most vulnerable to the following activities associated with contaminants detected in the water supply: fertilizer, pesticide/herbicide application and septic systems - high density. The sources are considered most vulnerable to the following activities not associated with any detected contaminants: injection wells/dry wells/sumps.

Radionuclides have been detected in the water sources but the levels of detection have not exceeded or met the maximum contaminant limit (MCL) in the monitoring history for this source. Radionuclide contaminants such as, beta particles and photon emitters, gross alpha particle activity, radium 226, and radium 228, occur naturally in the environment. Therefore, their presence may be related to natural occurrences in the environment. However, medical and veterinary offices and military installations are potential sources for radionuclide contamination related to the activities of man. Detection in this source may be naturally occurring.

Historical water samples have detected the presence of Nitrates. These samples have been below the MCL of 45 mg/L. Nitrates are typically associated with on-site sewage disposal as well as the use of fertilizers containing nitrogen. This subdivision is located in an area with high-density, on-site sewage disposal, and common fertilizer use.

Historical water samples have detected the presence of Dibromochloropropane (DBCP). Although past samples have detected this contaminant, it was below the MCL. DBCP is typically associated with pesticide use. Recent water quality analyses do not show the presence of DBCP.

Historical water samples have detected the presence of Chromium Hexavalent. Sources of this contaminant may include the manufacturing of wood preservative formulations. Other potentially contaminating activities include automotive, appliance and consumer product applications, steel hardening, stainless steel manufacturing, chromium plating, pigment making, leather tanning, welding, and water treatment facilities that use an oxidant such as chlorine, ozone or permanganate. These activities were not noted during the field assessment of this source.

For more information regarding the assessment summary, contact: Neil Carnes, water operator for Park Heights Mutual Water Company at: (209) 765-0162.