2016 Consumer Confidence Report

Surface Water System ID# 1840079

Annual Water Quality report for the period of January 1 to December 31, 2016

Providing Safe and Reliable Drinking Water

The Parker County Special Utility District (PCSUD) provides safe and reliable drinking water to meet the needs of the citizens it serves. It is of the utmost importance to assure that water quality meets or exceeds all Safe Drinking Water Standards established by the U.S. Environmental Protection Agency (EPA) as well as regulations set by the Texas Commission on Environmental Quality (TCEQ). The PCSUD utilizes a multi-barrier treatment process to accomplish this goal. The *Consumer Confidence Report* (CCR) is a summary of the quality of the water PCSUD provides to its customers. The report includes analysis results from the most current EPA required water quality tests. PCSUD hopes this information helps you, the consumer, become more knowledgeable about your drinking water supply.

Where Do We Get Our Drinking Water?

Source Water Name		Type of Water	Report Status	Location
INTAKE - BRAZOS RIVER		SURFACE WATER	ACTIVE	Dennis, TX
SW FROM CITY OF MINERAL WELLS	CC FROM TX1820001 CITY OF	SURFACE WATER	ACTIVE	Mineral Wells, TX

A Source Water Susceptibility Assessment for your drinking water source(s) is currently being updated by the Texas Commission on Environmental Quality. This information describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information contained in the assessment allows us to focus source water protection strategies. For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL: http://gis3.tceq.state.tx.us/swav/Controller/index.jsp?wtrs Further details about sources and source-water assessments are available in Drinking Water Watch at the following URL: http://dww.tceq.texas.gov/DWW

Sources of Drinking Water Contaminants

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. 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 EPA's Safe Drinking Water Hotline at (800) 426-4791

Contaminants that may be present in source water before treatment include:

- Microbial contaminants, such as viruses and bacteria, which may come from wastewater 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 storm water 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 storm water 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 storm water 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 prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact our business office.

En Espanol

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo o hable con alguien que lo entienda bien.

SPECIAL NOTICES

Public Participation Opportunities

Date: **3rd** Thursday of Every Month
Time: 7:00 p.m.
Location: 500 Brock Spur
Millsap, Texas 76066
Phone: 817-594-2900
To learn about future public meetings (concerning your drinking water), or to request to schedule one, please call.

For more information regarding this report contact PCSUD:
Phone: 817-594-2900

Secondary Contaminants

Many constituents (such as calcium, sodium, or iron) which are often found in drinking water can cause taste, color, and odor problems. The taste and odor constituents are called secondary constituents and are regulated by the State of Texas, not EPA. These constituents are not causes for health concern. Therefore, secondary constituents are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

Vulnerability of Some Populations to Contaminants in Drinking Water

Immuno-compromised individuals such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorder, 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/ Centers for Disease Control and Prevention (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 (1-800-426-4791)**. 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 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 it 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.

TERMS TO KNOW

The following tables contain scientific terms and measures, some of which may require explanation.

DEFINITIONS

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

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

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 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 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 contamination.

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.

ABBREVIATIONS

Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples

MFL: Million fibers per liter (a measure of asbestos)

na: Not applicable

NTU: Nephelometric Turbidity Units (a measure of turbidity)

pCi/L: Picocuries per liter (a measure of radioactivity)

ppm: Milligrams per liter or parts per million - or one ounce in 7,350 gallons of water

ppb: Micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water

ppq: Parts per quadrillion, or picograms per liter (pg/L)

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

In the water loss audit submitted to the Texas Water Development Board for the time period of Jan-Dec 2016, our surface system lost an estimated 16,711,065 gallons of water or 11.27%. If you have any questions about the water loss audit please call PCSUD 817-594-2900.

2016
Parker County Special Utility District
Regulated Contaminants Detected

Coliform Bacteria						
Maximum Contaminant Level Goal	**Total Coliform Maximum Contaminant Level**	**Highest No. of Positive Samples**	**Fecal Coliform or E. Coli Maximum Contaminant Level**	**Total No. of Positive E. Coli or Fecal Coliform Samples**	**Violation**	**Likely Source of Contamination**
0	no positive monthly samples	There were no TCR detection for this system in this CCR period	0	0	N	Naturally present in the environment.

Lead and Copper							
Definitions: Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALG's allow for a margin of safety. Action Level: The concentration of a contamination which, if exceeded, triggers treatment or other requirements which a water system must follow.							
Contaminant	**Collection Date**	**90th Percentile**	**Number of Sites Exceeding Action Level**	**Action Level**	**Units of Measure**	**Violation**	**Likely Source of Contamination**
Copper	9/9/2015	0.0563	0	1.3	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	9/9/2015	1.3	0	15	ppb	N	Corrosion of household plumbing systems. Erosion of natural deposits preservatives;

Disinfection Byproducts								
Disinfectants and Disinfectants By-Products	**Collection Date**	**Highest Level Detected**	**Range of Levels Detected**	**MCLG**	**MCL**	**Units of Measure**	**Violation**	**Likely Source of Contamination**
Haloacetic Acids (HAA5)	2016	19	6.1-13.2	No goal for the total	60	ppb	N	By-product of drinking water chlorination
Total Trihalomethanes (THM)	2016	20	9.13-34.2	No goal for the total	80	ppb	N	By-product of drinking water chlorination

Inorganic								
Contaminants	**Collection Date**	**Highest Level Detected**	**Range of Levels Detected**	**MCLG**	**MCL**	**Units of Measure**	**Violation**	**Likely Source of Contamination**
Arsenic	2016	1	0.73-0.73	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2016	0.029	0.029-0.029	2	2	ppm	N	Discharge from drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Cyanide	2016	100	100-100	200	200	ppb	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.
Fluoride	2016	0.1	0.0665-0.0665	4	4.0	ppm	N	Erosion of natural deposits; Water Additive which promotes strong teeth; Discharge from fertilizer and aluminum.
Nitrate [measured as Nitrogen]	2016	0.0425	0.014-0.0425	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Synthetic organic contaminants including pesticides and herbicides	**Collection Date**	**Highest Level Detected**	**Range of Levels Detected**	**MCLG**	**MCL**	**Units of Measure**	**Violation**	
Hexachlorocyclopentadiene	2015	1	0-0.7	0	6	ppb	N	Discharge from chemical factories.
Di (2-ethlhexyl) phthalate								

Radioactive Contaminants								
Radioactive Contaminants	**Collection Date**	**Highest Single Sample**	**Range of Levels Detected**	**MCLG**	**MCL**	**Units of Measure**	**Violation**	**Likely Source of Contamination**
Beta/photon emitters	1/25/2016	4.0	3.0-4.0	0	50	pCi/L	N	Decay of natural and man-made deposits.
Combined Radium 226/228	2/24/2016	1.0	0.48-1.0	0	5	pCi/L	N	Erosion of natural deposits

Violations Table

Lead and Copper Rule

The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.

Violation Type	Violation Begin	*Violation End*	Violation Explanation
FOLLOW-UP OR ROUTINE TAP M/R (LCR)	10/01/2016	2016	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated

In compliance with the Texas Commission on Environmental Quality (TCEQ), the Parker County Special Utility District (PCSUD) was issued a Monitoring Violation for not sampling for lead and copper during the summer of 2016. PCSUD was notified in October 2016 that the data was due in June 2016. In the past, PCSUD received reminders as the various deadlines approach if the appropriate data had not yet been provided. However, that was not the case in this situation.

What is most important is that immediately upon notification and to continue to ensure the safety of our water, PCSUD collected lead and copper samples knowing they would not be accepted by the TCEQ for compliance. If lead concentrations exceed an action level of 15 parts per billion or copper concentrations exceed an action level of 1.3 parts per million in more than 10% of customer taps sampled, then PCSUD must undertake a number of additional actions to control corrosion.

The samples collected by PCSUD water system for both lead and copper met all Federal and State requirements.

PCSUD is committed to exceeding recommended water safety standards.

Public Notification Rule

The Public Notification Rule helps to ensure that consumers will always know if there is a problem with their drinking water. These notices immediately alert consumers if there is a serious problem with their drinking water (e.g., a boil water emergency).

Violation Type	Violation Begin	*Violation End*	Violation Explanation
PUBLIC NOTICE RULE LINKED TO Lead and Copper Rule VIOLATION	01/10/2016	2016	We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations.

CRYPTOSPORIDIUM MONITORING INFORMATION

In 2016 the City of Mineral Wells tested our raw water monthly for Cryptosporidium, a microbial parasite that may be commonly found in surface water. Cryptosporidium may come from animal and human feces in the watershed. The results of our monitoring detected NO cryptosporidium present.
TOTAL COLIFORM: REPORTED MONTHLY TESTS FOUND NO COLIFORM BACTERIA.
FECAL COLIFORM: REPORTED MONTHLY TESTS FOUND NO FECAL COLIFORM BACTERIA.

Keep PCSUD Up To Date

PCSUD cannot contact you about interruptions in service if we do not have a current phone number. Please email pcsud@parkercountywater.com with phone numbers and email addresses.

Thank you

Secondary and Other Constituents Not Regulated						
(No associated adverse health effects)						
Contaminants	**Collection Date**	**Highest Single Sample**	**Range of Levels Detected**	**Secondary Limit**	**Unit of Measure**	**Likely Source of Contamination**
Bicarbonate	2016	75.5	75.5-75.5	NA	ppm	Corrosion of carbonate rocks such as limestone.
Chloride	2016	33.9	33.9-33.9	300	ppm	Abundant naturally occurring element; used in water purification; byproducts of oil field activity.
Hardness as Cs/Mg	2016	107	107-107	NA	ppm	Naturally occurring calcium and magnesium.
pH	2015	8.5	8.2-8.5	8.5	Units	Measure of corrosively of water.
Sulfate	2016	50.8	50-8-50.8	300	ppm	Naturally occurring; common industrial byproducts; byproducts of oil field activity.
Total Alkalinity As CaCO3	2016	20	20-20	NA	ppm	Naturally occurring soluble mineral salts.
Total Dissolved Solids	2016	224	224-224	1000	ppm	Total dissolved mineral constituents in water.

Organics
Tested Waved Not Reported, or Non Detected

Maximum Residual Disinfection Level								
Systems must complete and submit disinfection data on the Surface Water Monthly Operations Report (SWMOR). On the CCR report, the system must Provide disinfectant type, minimum, maximum and average.								
Contaminants	**Collection Date**	**Highest Single Sample**	**Range of Levels**	**MRDL**	**MRDLG**	**Units of Measure**	**Violation**	**Likely Source of Contamination**
Chlorine	2016	3.57	2.6-3.9	3.9	<3.9	ppm	N	Disinfectant used to control microbes.

Unregulated Contaminants					
Contaminants	**Collection Date**	**Highest Single Sample**	**Range of Levels Detected**	**Unit of Measure**	**Likely Source of Contamination**
Chloromethane	2016	<0.500ug/L	0.500-0.500	ppb	Byproduct of drinking water disinfection.
Chloroform	2016	10.7	1.28-10.7	ppb	Byproduct of drinking water disinfection
Bromoform	2016	61.40	1.58-61.4	ppb	Byproduct of drinking water disinfection
Bromodichloromethane	2016	15.30	4.6-15.3	ppb	Byproduct of drinking water disinfection
Dibromochloromethane	2016	37.38	9.8-37.8	ppb	Byproduct of drinking water disinfection

Total Organic Carbon					
Contaminants	**Collection Date**	**Highest Single Sample**	**Range of Levels Detected**	**Unit of Measure**	**Likely Source of Contamination**
Source Water	2016	5.82	5.00-7.40	ppm	Naturally present in the environmental
Drinking water	2016	3.06	2.70-3.40	ppm	Naturally present in the environmental
Removal Ratio	2016	1.42	1.18-1.64	%removal*	N/A

*Removal ratio is the percent of TOC removed by the treatment process divided by the percent of TOC required by TCEQ to be removed. This number should be greater than 1.0.

*Total Organic Carbon (TOC) no health effects. The disinfectant can combine with TOC to form disinfection by-products. Disinfection is necessary to ensure that water does not have unacceptable levels of pathogens. Byproducts of disinfection include trihalomethanes (THMs) and haloacetic acids (HAA) which are reported elsewhere in this report.

Turbidity				
	Levels Detected	**Treatment Technique Violation if:**	**Treatment Technique Violation (Y/N)**	**Likely Source of Contamination**
Highest single measurement	0.17 NTU	Turbidity > 1 NTU	N	Soil runoff.
Lowest monthly % meeting turbidity limits	100.0%	Less than 95% of monthly turbidity measurements are < 0.30 NTU	N	Soil runoff.