

2017 Consumer Confidence Report for Public Water System CITY OF KERMIT

This is your water quality report for January 1 to December 31, 2017.
The City of Kermit had no violations to report for this period.

CITY OF KERMIT provides ground water from the Dockum (Santa Rosa) aquifer located in Kermit, Winkler County, Texas.

For more information regarding this report contact:

Name: Sylvester Alarcon _____

Phone: 432/586-3468 _____

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (432) 586-3468.

PUBLIC PARTICIPATION OPPORTUNITIES

To learn more about future public meetings concerning your drinking water:

Date: 3rd Thursday of each month

Time: 6:30 p.m.

Location: City Council Chambers – City Hall – 110 S. Tornillo St.
432-586-3468

Information about your Drinking Water

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 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 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 the system's business office.

You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly, or immunocompromised persons such as those undergoing chemotherapy for cancer; persons who have undergone organ transplants; those who are undergoing treatment with steroids; and people with HIV/AIDS or other immune system disorders, can be particularly at risk from infections. You should seek advice about drinking water from your physician or health care providers. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline (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. We are responsible for providing high quality drinking water, but we 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>.

Information about Source Water

TCEQ completed an assessment of your source water, and results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for your water system is based on this susceptibility and previous sample data. Any detections of these contaminants will be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system contact **Sylvester Alarcon at 432-586-3468**. The System Susceptibility Summary lists metals and VOC's (volatile organic chemicals) as HIGH for our system. The Entry Point Susceptibility Summary lists metals, microbial, minerals, SOC's (synthetic organic chemicals) and VOC's as HIGH for the Underwood Pump Station (EP 001). EP 001 is listed as a HIGH drinking water contaminant candidate also. EP 002 (Walton Pump Station) is listed as HIGH for metals on the Entry Point Susceptibility Summary.

DISINFECTION:

The City of Kermit utilizes gaseous chlorine to control microbes in our drinking water, purchased from DPC Industries, Sweetwater, Texas. We had no microbial violations nor detections for 2017.

<i>Average Level</i>	<i>Lowest Level</i>	<i>Highest Level</i>	<i>MRDL</i>	<i>MRDLG</i>	<i>Unit of Measure</i>
0.74	0.21	1.95	4	4	mg/l or ppm (free chlorine residual)

WATER LOSS:

In the Water Loss Audit submitted to the Texas Water Development Board for the time period of January – December 2017, our system loss an estimated 45,291,053 gallons of water or 9.1% of the 497,607,143 gallons total water produced. If you have any questions about the Water Loss Audit please call 432-586-3468 or come by 110 S. Tornillo St., Kermit, Texas for a copy of the report.

Definitions and Abbreviations

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Action Level:

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

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.

Avg:

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

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.

Maximum Contaminant Level or 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 or 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 or 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 or 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.

MFL

million fibers per liter (a measure of asbestos)

mrem:

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

na:

not applicable.

NTU

nephelometric turbidity units (a measure of turbidity)

pCi/L

pico curies per liter (a measure of radioactivity)

ppb:

micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

ppm:

milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

ppq

parts per quadrillion, or picograms per liter (pg/L)

ppt

parts per trillion, or nanograms per liter (ng/L)

Treatment Technique or TT:

A required process intended to reduce the level of a contaminant in drinking water.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	08/24/2016	1.3	1.3	0.0684	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead	08/24/2016	0	1.5	0.9	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

2017 Water Quality Test Results

Disinfection By-Products	Collection Date	Highest Level or Average Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Halooacetic Acids (HAA5)	2017	1	1.3 - 1.3	No goal for the total	60	ppb	N	By-product of drinking water disinfection.

* The value in the Highest Level or Average Detected column is the highest average of all HAA5 sample results collected at a location over a year

Total Trihalomethanes (TTHM)	2017	2	2.41 - 2.41	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
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* The value in the Highest Level or Average Detected column is the highest average of all TTHM sample results collected at a location over a year

Unregulated Contaminants:

Bromoform	2017	2	2.41 - 2.41	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
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Dibromoacetic acid	2017	1	1.3 - 1.3	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
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Inorganic Contaminants	Collection Date	Highest Level or Average Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Antimony	06/30/2016	0.26	0.26 - 0.26	6	6	ppb	N	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder; test addition.
Arsenic	06/30/2016	1.8	0.71 - 1.8	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	06/30/2016	0.11	0.06 - 0.11	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2017	1.1	0.633 - 1.1	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2017	2	1.67 - 2.26	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Selenium	06/30/2016	4.4	3.5 - 4.4	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
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Volatile Organic Contaminants	Collection Date	Highest Level or Average Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Trichloroethylene	2017	1	0 - 0.7	0	5	ppb	N	Discharge from metal degreasing sites and other factories.

Radioactive Contaminants	Collection Date	Highest Level or Average Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/Photon emitters	06/30/2016	5	4.7 - 5	0	4	mrem/yr	N	Decay of natural and man-made deposits.

*EPA considers 50 pCi/L to be the level of concern for beta particles.

Gross alpha excluding radon and uranium	06/30/2016	4.4	0 - 4.4	0	15	pCi/L	N	Erosion of natural deposits.
Uranium	06/30/2016	3.1	1.6 - 3.1	0	30	ug/l	N	Erosion of natural deposits.

The following pages contain information from the EPA and the TCEQ Midland Office during 2016.



May 5, 2016 – TCEQ comprehensive compliance investigation on March 22, 2016:

Not a violation nor a significant deficiency, the iron and manganese concentrations in some of our wells results in "discolored" water complaints from time to time. The City is being proactive by budgeting funds for the 2016-2017 fiscal year to resolve this issue. We are about ready to initiate the injection of a polyphosphate to keep the iron and manganese in suspension. We have five well sites that will be targeted. The City of Kermit will be using Univar USA out of Houston to provide the chemical Carus 8100. Mr. Brian Miles is the Univar representative for this project and will be supplying the chemical in small containers, less than normal bulk volumes. We only need a total of 61.63 gallons of the Carus 8100 per year, utilizing anywhere from 0.091 to 27.363 gallons per year per well. As soon as we get the container issue resolved, The City of Kermit will be initiating the polyphosphate injection.

September 9, 2016 – EPA notification of National Priorities Listing of the Highway 18 Groundwater Site: The EPA, with the assistance of the TCEQ, determined that some of our wells contained elevated levels of two contaminants, PCE (tetrachloroethylene) and TCE (trichloroethylene). Note: see page 7 as these contaminants are well below the Maximum Contaminant Level when blended with all of our wells. The TCEQ and the City of Kermit have tried unsuccessfully to identify the possible source of these contaminants since they are man-made and not a naturally occurring element of our underground aquifer. The next step will involve the EPA, the TCEQ and the City of Kermit doing a more diligent search for the source of these contaminants.

Bryan W. Shaw, Ph.D., P.E., Chairman
Toby Baker, Commissioner
Jon Niermann, Commissioner
Richard A. Hyde, P.E., Executive Director

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
Protecting Texas by Reducing and Preventing Pollution

May 5, 2016

The Honorable Jerry Phillips, Mayor
City of Kermit
110 South Tornillo Street
Kermit, TX 79745-2312

Re: Comprehensive Compliance Investigation of Public Water Supply at:
City of Kermit, Winkler County, Texas
RN101391688, TCEQ Public Water Supply: 2480001

Dear Mayor Phillips:

On March 22, 2016, Mr. Lindsey Buckner of the Texas Commission on Environmental Quality (TCEQ) Midland Region Office conducted an investigation of the above-referenced facility to evaluate compliance with applicable requirements for public water supply. No violations are being alleged as a result of the investigation; however an additional issue is addressed by the enclosed Summary of Investigation Findings. At this time, your public water system continues to merit recognition as a "Superior" system.

The TCEQ appreciates your assistance in this matter and your compliance efforts to ensure protection of the State's environment. If you or members of your staff have any questions regarding these matters, please feel free to contact Mr. Buckner in the Midland Region Office at (432) 570-1359.

Sincerely,

Camilo Chavez
Section Manager
Midland Region
CC/adb

Enclosure: Summary of Investigation Findings

SUMMARY OF INVESTIGATION FINDINGS

Inspection Date: March 22, 2016	Public Water Supply: 2480001	Entity: City of Kermit
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ADDITIONAL ISSUES

1. You are currently blending wells with lower manganese and iron concentrations with wells that have higher concentrations. This is apparently becoming more problematic and could result in an exceedance for manganese and iron. At the investigation the investigator was informed that Kermit is planning to test polyphosphate injection at five wells for control of the manganese and iron. This forward planning is commendable and could save your Superior status from revocation if manganese and iron concentrations are not controlled.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 REGION 6
 1445 ROSS AVENUE, SUITE 1200
 DALLAS TX 75202-2733

Mayor Jerry Phillips
 110 S. Tomillo
 Kermit, Texas 79745

Dear Mayor Phillips:

Subject: National Priorities Listing proposal of the Highway 18 Groundwater Site.

The purpose of this letter is to inform you that the Highway 18 Ground Water site, in Kermit, Texas was proposed to the NPL on September 9, 2016. The EPA proposed several sites to the National Priorities List (NPL), the list of national priorities among the known releases or threatened releases of hazardous substances, pollutants, or contaminants throughout the U.S. Under the Comprehensive Environmental Response, Compensation, and Liability Act (commonly known as Superfund), EPA is responsible for locating, assessing and cleaning up uncontrolled or abandoned hazardous waste sites.

The proposed listing will allow EPA to further investigate contamination at the site and develop an approach to address this contamination. Next steps include continuing our enforcement process to identify Potential Responsible Parties; strategizing a Remedial Investigation / Feasibility Study; developing a Community Involvement Plan; and, establishing a public information repository and assessing the need for time-critical removal activities under our Removal Program. EPA is committed to working with your community throughout this process and will provide updates of future activities at the site.

I am enclosing a brief fact sheet about the site and information on the Superfund program. A notice regarding the proposal of the Highway 18 Ground Water site to the NPL was published in the *Federal Register* on September 9, 2016. The NPL update is available on the EPA's Superfund web site at <http://www.epa.gov/superfund/sites/npl>. The Superfund web site was updated September 9, 2016, with all of the supporting information for this rule.

If you would like more information, or prefer a briefing or site tour, please contact Brenda Cook, Region 6 NPL Coordinator, at 214-665-7436.

Sincerely,

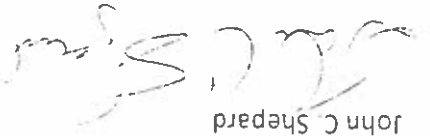
Carl E. Edlund, P.E.

Carl E. Edlund, P.E.
 Director
 Superfund Division

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Highway 18 Ground Water Site September 16, 2016

Vince Malott, U.S. EPA Region 6 along with Terry Andrews and Kandice Spera, TCEQ (Texas Commission on Environmental Quality) came before the Kermit City Council on Thursday, September 15, 2016. They explained that levels of PCE (tetrachloroethylene) and TCE (trichloroethylene) have been detected in some of our wells, and as such, delineated the area of the contaminated groundwater plume. Four of the City's PWS (Public Water Supply) wells exceed the MCL (Maximum Contaminant Level) for these contaminants. The blending of all the Kermit water wells prior to customer distribution lowers the concentrations of PCE and TCE to well below safe drinking water standards set by the EPA. Kermit's water is safe to drink. After a 60-day public comment period, the EPA will begin a more extensive remedial investigation in an attempt to locate the unknown source of these contaminants.


John C. Shepard
Director of Public Works

