



City of
Manvel

TEXAS

PWS #: TX0200407

2017 Annual Drinking Water Quality Report



Sources of Drinking Water

The sources of drinking water (both tap 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 salt 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 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.

Secondary Constituents: 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 the 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.

Special Notice: *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; those 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 for infections. You should seek advice about drinking water from your physician or health care provider.*

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.

Additional guidelines are available from the Safe Drinking Water Hotline (800)426-4791.

About this report: The TCEQ completed an assessment of your source water and results indicate that some of your sources are susceptible to certain contaminants. The sampling requirements for your water system are solely based on this susceptibility and previous sample data. Any detections may be found in this Consumer Confidence Report.

| | YEAR | MCL | MCLG | Minimum-Maximum Level | Violation | Likely Source of Contamination |
|---------------------------------|------|-----|------|-----------------------|-----------|--|
| Inorganic Contaminants | | | | | | |
| Arsenic (ppb) | 2015 | 10 | 0 | 4.9 – 4.9 | No | Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes. |
| Barium (ppm) | 2015 | 2 | 2 | 0.0855 – 0.0855 | No | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits. |
| Fluoride (ppm) | 2015 | 4 | 4 | 1.38 – 1.38 | No | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories. |
| Nitrate (ppm) | 2016 | 10 | 10 | 0.02 – 0.02 | No | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion from natural deposits. |
| Radioactive Contaminants | | | | | | |
| Combined Radium 226/228 (pCi/L) | 2012 | 5 | 0 | 1 - 1 | No | Erosion of natural deposits. |
| Disinfection By-Products | | | | | | |
| Haloacetic Acids (ppb) | 2017 | 60 | None | 1.3 – 1.3 | No | Byproduct of drinking water disinfection. |
| Total Trihalomethanes (ppb) | 2017 | 80 | None | 9.1 – 9.1 | No | Byproduct of drinking water disinfection. |

| Lead and Copper | | | | | | | |
|------------------------|------|------|-------------------|-----------------------------|-----------------|-----------|---|
| | YEAR | MCLG | Action Level (AL) | 90 th Percentile | # Sites over AL | Violation | LIKELY SOURCE OF CONTAMINATION |
| Copper (ppm) | 2017 | 1.3 | 1.3 | 0.447 | 0 | No | Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems. |
| Lead (ppm) | 2017 | 0 | 15 | 2 | 0 | No | Corrosion of household plumbing systems; Erosion of natural deposits. |

| Maximum Residual Disinfectant Level | | | | | | |
|--|------|------|-------|----------------------|---------|--|
| | YEAR | MRDL | MRDLG | RANGE: Min-Max Level | AVERAGE | LIKELY SOURCE OF CONTAMINATION |
| Chlorine, Free (ppm) | 2017 | 4.0 | 4.0 | 0.37 – 4.0 | 1.66 | Disinfectant used to control microbes. |

Total Coliform: Reported monthly tests found no Coliform bacteria.

Total Coliform bacteria are used as indicators of microbial contamination of drinking water because testing for them is easy. While not disease causing organisms themselves, they are often found in association with other microbes that are capable of causing disease. Coliform bacteria are more hardy than many disease causing organisms; therefore, the absence from water is a good indication that the water is microbially safe for human consumption.

| Violations | Violation Begin | Violation End | Violation Explanation |
|------------|-----------------|---------------|--|
| CCR Report | 07/01/2017 | 12/13/2017 | We failed to provide to you, our drinking water customers, an annual report that informs you about the quality of our drinking water and characterizes the risks from exposure to contaminants detected in our drinking water. |

OUR DRINKING WATER IS REGULATED

This report is a summary of the quality of the water we provide our customers. The analysis was made by using the data from the most recent U. S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

Where Do We Get Our Drinking Water?

City of Manvel provides Ground Water from the Evangeline and Chicot Aquifers located in Brazoria County. The Texas Commission on Environmental Quality completed an assessment of your source water and results indicate that some of your sources are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detection of these contaminants may be found in this Consumer Confident Report. For more information on source water assessments and protection efforts at our system, contact Michael White.

Definitions and Abbreviations:

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected health risk. MCLGs allow for a margin of safety.

Maximum Contaminant Level (MCL): The highest permissible level of a contaminant in drinking water. MCLs are set as close to the MCLG as feasible using the best available treatment technology.

Maximum Residual Disinfectant Level (MRDL): The highest level of disinfectant allowed in 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 contamination.

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

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

Parts per million (ppm): The equivalent of milligrams per liter (mg/L) is analogous to 1 minute in 2 years.

Parts per billion (ppb): The equivalent of micrograms per liter (ug/L) is analogous to 1 minute in 32 years.

NA: Not applicable.

Public Participation Opportunities:

For more information regarding the City of Manvel water system contact:

Michael White
281-489-0630

<http://www.cityofmanvel.com/DocumentCenter/View/708/Manvel-CCR-2017>

En Español:

Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre este informe en español, favor de llamar al tel. 281-489-0630 para hablar con una persona bilingüe en español.

Important Information About Your Drinking Water

Public water systems must routinely monitor for drinking water contaminants. CITY OF MANVEL, TX02U0407 failed to monitor for or meet drinking water standards. The table below lists each violation, the time period(s), potential health effects, and associated analytical results (if applicable).

| Violation | Violation Number | Time Period(s) Of Violation(s) | Potential Health Effects | Analytical Results |
|---|------------------|--------------------------------|---|------------------------------------|
| A Disinfectant Level Quarterly Operating Report (DLQOR) violation | 2016 22 | 10/10/2015 to 12/31/2015 | Required Disinfection Quarterly Operating Report Samples were not collected for the specified monitoring Period | No Analytical Result(s) Associated |

You **do not** need to boil your water or obtain alternative water supply (e.g. bottle water) at this time. However, if you have specific health concerns, consult your doctor.

If you have a severely compromised immune system, have an infant, are pregnant, or are elderly, you may be at increased risk and should seek advice from your health care providers about drinking this water. General guidelines on ways to lessen the risk of drinking water contaminants are available from EPA's Safe Drinking Water Hotline at 1-800-426-4791.

Corrective Action:

CITY OF MANVEL has taken the following action(s) to return the system to compliance:

The Public Notice was posted on the city website at www.cityofmanvel.com on 10/28/2016 as required by TCEQ. In good faith the city made sure all customers were aware of violation at that time, and the department implemented additional procedure to assure the DLQOR/Disinfectant Level Quarterly Operating Report paperwork is submitted before due date. We strive to build trust with our consumers and establish a positive relationship with our community.

For more information, or to learn more about protecting your drinking water, please contact CITY OF MANVEL TX0200407 representative Michael White at 281-489-0630 Ext 6

Michael White
 Utilities Director

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.