ANNUAL WATER QUALITY REPORT

Water Testing Performed in 2017

Presented By
City of El Campo

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al teléfono (979) 541-5075.

PWS ID#: TX2410002
Quality First

Once again we are pleased to present our annual water quality report. As in years past, we are committed to delivering the best-quality drinking water possible. To that end, we remain vigilant in meeting the challenges of new regulations, source water protection, water conservation, and community outreach and education while continuing to serve the needs of all of our water users. Thank you for allowing us the opportunity to serve you and your family.

We encourage you to share your thoughts with us on the information contained in this report. After all, well-informed customers are our best allies.

Water Loss Audit

In the water loss audit submitted to the Texas Water Development Board during the year covered by this report, our system lost an estimated 40,148,764 gallons of water. If you have any questions about the water loss audit, please call 979-541-5076.

Source Water Assessment

A Source Water Susceptibility Assessment for your drinking water sources is currently being updated by the Texas Commission on Environmental Quality (TCEQ). 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:


Where Does My Water Come From?

The City of El Campo Water Department customers are fortunate because they enjoy an abundant water supply from five water wells. These water wells draw water from a combination of the Angelina and the Chicot groundwater formations, which range in depth from 750 feet to 1,400 feet. Combined, these wells are capable of producing about eight million gallons of high-quality drinking water every day. During all of 2017, your water department produced and delivered to your taps 595,991,000 gallons of water, an average of 1,632,852 gallons per day! These numbers indicate that the current water supply should be adequate to provide the City of El Campo with high-quality drinking water for several years to come.

Important Health Information

While your drinking water meets the U.S. EPA's standard for arsenic, it does contain low levels of arsenic. The EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

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 from infections. You should seek advice about drinking water from your physician or health care provider. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.

Lead in Home Plumbing

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. This water supply is 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 www.epa.gov/safewater/lead.
Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

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 can acquire naturally occurring minerals, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater 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 stormwater runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

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 the taste, odor, or color of drinking water, please contact our business office. For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Water Conservation Tips

You can play a role in conserving water and save yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water-using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

Community Participation

You are invited at any time to attend the City of El Campo City Council meetings and voice any concerns you may have about your drinking water. The City Council meets the second and fourth Mondays of every month, beginning at 6:30 p.m., at the City Hall, 315 East Jackson Street, El Campo, Texas, 77437. Please call (979) 541-5000 to confirm meeting times.

For more information about this report, or for any questions relating to your drinking water, please call Jerry Lewis, Director of Utilities, at (979) 541-5076.
FOG (Fats, Oils, and Grease)

You may not be aware of it, but every time you pour fat, oil, or grease (FOG) down your sink (e.g., bacon grease), you are contributing to a costly problem in the sewer collection system. FOG coats the inner walls of the plumbing in your house as well as the walls of underground piping throughout the community. Over time, these greasy materials build up and form blockages in pipes, which can lead to wastewater backing up into parks, yards, streets, and storm drains. These backups allow FOG to contaminate local waters, including drinking water. Exposure to untreated wastewater is a public health hazard. FOG discharged into septic systems and drain fields can also cause malfunctions, resulting in more frequent tank pump-outs and other expenses.

Communities spend billions of dollars every year to unplug or replace grease-blocked pipes, repair pump stations, and clean up costly and illegal wastewater spills. Here are some tips that you and your family can follow to help maintain a well-run system now and in the future:

NEVER:
• Pour fats, oil, or grease down the house or storm drains.
• Dispose of food scraps by flushing them.
• Use the toilet as a waste basket.

ALWAYS:
• Scrape and collect fat, oil, and grease into a waste container such as an empty coffee can, and dispose of it with your garbage.
• Place food scraps in waste containers or garbage bags for disposal with solid wastes.
• Place a wastebasket in each bathroom for solid wastes like disposable diapers, creams and lotions, and personal hygiene products including nonbiodegradable wipes.

What’s a Cross-Connection?

Cross-connections that contaminate drinking water distribution lines are a major concern. A cross-connection is formed at any point where a drinking water line connects to equipment (boilers), systems containing chemicals (air conditioning systems, fire sprinkler systems, irrigation systems), or water sources of questionable quality. Cross-connection contamination can occur when the pressure in the equipment or system is greater than the pressure inside the drinking water line (backpressure). Contamination can also occur when the pressure in the drinking water line drops due to fairly routine occurrences (main breaks, heavy water demand), causing contaminants to be sucked out from the equipment and into the drinking water line (backsiphonage).

Outside water taps and garden hoses tend to be the most common sources of cross-connection contamination at home. The garden hose creates a hazard when submerged in a swimming pool or when attached to a chemical sprayer for weed killing. Garden hoses that are left lying on the ground may be contaminated by fertilizers, cesspools, or garden chemicals. Improperly installed valves in your toilet could also be a source of cross-connection contamination.

Community water supplies are continuously jeopardized by cross-connections unless appropriate valves, known as backflow prevention devices, are installed and maintained. We have surveyed industrial, commercial, and institutional facilities in the service area to make sure that potential cross-connections are identified and eliminated or protected by a backflow preventer. We also inspect and test backflow preventers to make sure that they provide maximum protection.

For more information on backflow prevention, contact the Safe Drinking Water Hotline at (800) 426-4791.

Benefits of Chlorination

Disinfection, a chemical process used to control disease-causing microorganisms by killing or inactivating them, is unquestionably the most important step in drinking water treatment. By far, the most common method of disinfection in North America is chlorination.

Before communities began routinely treating drinking water with chlorine (starting with Chicago and Jersey City in 1908), cholera, typhoid fever, dysentery, and hepatitis A killed thousands of U.S. residents annually. Drinking water chlorination and filtration have helped to virtually eliminate these diseases in the U.S. Significant strides in public health are directly linked to the adoption of drinking water chlorination. In fact, the filtration of drinking water plus the use of chlorine is probably the most significant public health advancement in human history.

How chlorination works:

Potent Germicide Reduction in the level of many disease-causing microorganisms in drinking water to almost immeasurable levels.
Taste and Odor Reduction of many disagreeable tastes and odors like foul-smelling algae secretions, sulfides, and odors from decaying vegetation.
Biological Growth Elimination of slime bacteria, molds, and algae that commonly grow in water supply reservoirs, on the walls of water mains, and in storage tanks.
Chemical Removal of hydrogen sulfide (which has a rotten egg odor), ammonia, and other nitrogenous compounds that have unpleasant tastes and hinder disinfection. It also helps to remove iron and manganese from raw water.
Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule. The information in the data tables shows only those substances that were detected between January 1 and December 31, 2017. Remember that detecting a substance does not necessarily mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels. The state monitoring for certain substances less often than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

We participated in the 3rd stage of the U.S. EPA’s Unregulated Contaminant Monitoring Rule (UCMR3) program by performing additional tests on our drinking water. UCMR3 benefits the environment and public health by providing the EPA with data on the occurrence of contaminants suspected to be in drinking water, in order to determine if the EPA needs to introduce new regulatory standards to improve drinking water quality. Contact us for more information on this program.

### REGULATED SUBSTANCES

<table>
<thead>
<tr>
<th>SUBSTANCE</th>
<th>UNIT OF MEASURE</th>
<th>YEAR SAMPLED</th>
<th>MCL (MRDL)</th>
<th>MCLG (MRDLG)</th>
<th>AMOUNT DETECTED</th>
<th>RANGE LOW-HIGH</th>
<th>VIOLATION</th>
<th>TYPICAL SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpha Emitters</td>
<td>pCi/L</td>
<td>2017</td>
<td>15</td>
<td>15</td>
<td>0</td>
<td>8</td>
<td>4–8</td>
<td>No</td>
</tr>
<tr>
<td>Arsenic</td>
<td>ppb</td>
<td>2017</td>
<td>10</td>
<td>10</td>
<td>0</td>
<td>5.2</td>
<td>5.2–5.2</td>
<td>No  Erosion of natural deposits</td>
</tr>
<tr>
<td>Barium</td>
<td>ppm</td>
<td>2017</td>
<td>2</td>
<td>2</td>
<td>0.225</td>
<td>0.191–0.225</td>
<td>No</td>
<td>Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits</td>
</tr>
<tr>
<td>Chlorine</td>
<td>ppm</td>
<td>2017</td>
<td>[4]</td>
<td>[4]</td>
<td>1.28</td>
<td>0.49–1.77</td>
<td>No</td>
<td>Water additive used to control microbes</td>
</tr>
<tr>
<td>Combined Radium</td>
<td>pCi/L</td>
<td>2017</td>
<td>5</td>
<td>5</td>
<td>0.33</td>
<td>0.00–1.33</td>
<td>No</td>
<td>Erosion of natural deposits</td>
</tr>
<tr>
<td>Fluoride</td>
<td>ppm</td>
<td>2017</td>
<td>4</td>
<td>4</td>
<td>0.35</td>
<td>0.31–0.35</td>
<td>No</td>
<td>Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories</td>
</tr>
<tr>
<td>Nitrate</td>
<td>ppm</td>
<td>2017</td>
<td>10</td>
<td>10</td>
<td>1.0</td>
<td>0.26–0.54</td>
<td>No</td>
<td>Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits</td>
</tr>
<tr>
<td>TTHMs [Total Trihalomethanes]</td>
<td>ppb</td>
<td>2017</td>
<td>80</td>
<td>NA</td>
<td>4.0</td>
<td>0.00–4.6</td>
<td>No</td>
<td>By-product of drinking water disinfection</td>
</tr>
<tr>
<td>Uranium</td>
<td>ppb</td>
<td>2017</td>
<td>30</td>
<td>0</td>
<td>2.0</td>
<td>1.6–2.0</td>
<td>No</td>
<td>Erosion of natural deposits</td>
</tr>
</tbody>
</table>

Tap water samples were collected for lead and copper analyses from sample sites throughout the community.

<table>
<thead>
<tr>
<th>SUBSTANCE</th>
<th>UNIT OF MEASURE</th>
<th>YEAR SAMPLED</th>
<th>AL</th>
<th>MCL (MRDL)</th>
<th>AMOUNT DETECTED (90TH% TILE)</th>
<th>SITES ABOVE AL/ TOTAL SITES</th>
<th>VIOLATION</th>
<th>TYPICAL SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper</td>
<td>ppm</td>
<td>2016</td>
<td>1.3</td>
<td>1.3</td>
<td>0.13</td>
<td>0/30</td>
<td>No</td>
<td>Corrosion of household plumbing systems; Erosion of natural deposits</td>
</tr>
<tr>
<td>Lead</td>
<td>ppm</td>
<td>2016</td>
<td>15</td>
<td>0.2</td>
<td>2.1</td>
<td>0/30</td>
<td>No</td>
<td>Corrosion of household plumbing systems; Erosion of natural deposits</td>
</tr>
</tbody>
</table>

### SECONDARY SUBSTANCES

<table>
<thead>
<tr>
<th>SUBSTANCE</th>
<th>UNIT OF MEASURE</th>
<th>YEAR SAMPLED</th>
<th>SCL</th>
<th>MCLG</th>
<th>AMOUNT DETECTED</th>
<th>RANGE LOW-HIGH</th>
<th>VIOLATION</th>
<th>TYPICAL SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH (Units)</td>
<td></td>
<td>2017</td>
<td>&gt;7.0</td>
<td>NA</td>
<td>7.75</td>
<td>7.7–7.8</td>
<td>No</td>
<td>Naturally occurring</td>
</tr>
<tr>
<td>Total Dissolved Solids [TDS]</td>
<td>ppm</td>
<td>2017</td>
<td>1,000</td>
<td>NA</td>
<td>356</td>
<td>347–366</td>
<td>No</td>
<td>Runoff/leaching from natural deposits</td>
</tr>
</tbody>
</table>

### Definitions

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

LRAA (Locational Running Annual Average): The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters. Amount Detected values for TTHMs and HAAs are reported as the highest LRAA.

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

MCLG (Maximum Contaminant Level Goal): 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.

MRDL (Maximum Residual Disinfectant Level): 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.

MRDLG (Maximum Residual Disinfectant Level Goal): 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.

NA: Not applicable

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

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

SCL (Secondary Constituent Level): SCLs are established to regulate the aesthetics of drinking water like appearance, taste and odor.