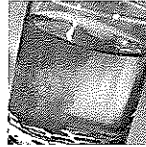


# HICKORY CREEK SPECIAL UTILITY DISTRICT

## 2014 Annual Drinking Water Quality Report

### Sources of 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>.

### Annual Water Quality Report

January 1 to December 31, 2014

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

For more information regarding this report contact:

**Mike Wemhoener, General Manager 903.568.4760**

### Public Participation Opportunities

**Date:** 3<sup>rd</sup> Monday of the Month

**Time:** 7:00 pm

**Location:** Hickory Creek SUD Office

**Phone No:** 903.568.4760

To learn about future public meetings (concerning your drinking water), or to request to schedule one, please call us.

### 2015 Board of Directors

**Jimmy Beach**  
214.325.9730

**Frances Caplinger**  
903.408.9958

**Tammy Cross**  
903.454.2131

**Phillip George**  
972.342.1134

**Brandon Lamm**  
903.450.3187

**James "Bo" Walker**  
903.408.9808

**Brad White**  
903.408.7272

### Office Hours

**Monday—Friday**  
8:00am —3:00 pm

**Office Phone**  
903.568.4760

**Fax**  
903.568.4867

**Emergency No.s**  
903.456.0916  
903.217.7902

### En Español

Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre éste informe en español, favor de llamar al tel. 903.568.4103 - para hablar con una persona bilingüe en español.

### WE ARE EXCITED TO ANNOUNCE THAT WE HAVE LAUNCHED A NEW WEBSITE!!!!

You can now pay your water bill online and subscribe to our alert system, you will receive alerts and news via email and text.

[www.hickorycreeksud.com](http://www.hickorycreeksud.com)

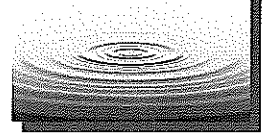


### Finding Leaks & Water Heater Maintenance

You may have a water leak of which you are unaware. It's easy to check, follow these instructions:

**Service Line:** (A leak between the water meter and the house.)

- 1.) Find the water meter
- 2.) Turn off all running water and water-using appliances, and do not flush the toilet
- 3.) Read the dial on the water meter and record the reading. After 15 to 20 minutes, re-check the reading.
- 4.) If no water has been used and the reading has changed, a leak is occurring. The rate (gallon per minute) of the leak can be determined by dividing the number of gallons by the elapsed time.
- 5.) If the leak cannot be found and fixed, a plumber should be called. Before calling, check all toilets for silent leaks by following the instructions below.



When a toilet leaks, water escapes from the tank into the bowl. Toilets are notorious for hidden or silent leaks, because leaks are seldom noticed unless the toilet "runs" after each flush (which can waste 4-5 gallons a minute). To determine if the toilet is leaking do the following:

Look at the toilet bowl after the tank has stopped filling. If water is still running into the bowl or if water can be heard running, the toilet is leaking. Often times, however, the toilet may have a "silent leak". To test for silent leak, mix a few drops of food coloring or place a dye capsule (available free of charge at our office) into the water in the toilet storage tank after the water has stopped running and the tank is full. **DO NOT FLUSH THE TOILET.** Wait for about 10 minutes, if the dye or food coloring appears in the Leaks of this type are usually caused by a defective flush valve (flapper) ball or a corroded or scaled valve seat. Replacement balls and valves, which can be installed in less than 30 minutes, are available from most hardware and plumbing stores.

#### **Faucet Leaks:**

Faucet leaks are obvious. The cause of faucet leaks is frequently a worn washer that can be replaced with two or three hand tools. Replacement washers can be purchased from most hardware and variety stores for only a few cents.

#### **Water Heater Maintenance:**

Water heaters, gas or electric, have become more complex and expensive. They also do not seem to last as long as they once did. This is one modern appliance that we could not live without, but is "out of sight, out of mind" until we have problems.

#### **Hot Water Heater Flushing:**

Maintenance books recommend that the hot water heater be drained (flushed) every six months, but few homeowners bother to do this. Often, it is put in an area that is not as accessible as other appliances. It may or may not be easy to drain, even though all heaters have a hose connection and faucet control at the bottom. This task is not only inconvenient, but often the washer and/or washer seat on the faucet must be replaced after draining. Sometimes the entire faucet assembly will have to be replaced. If it is not done correctly, the unit may leak at the faucet. Furthermore the unit can be damaged while draining. Unless you are fully familiar with servicing these units, one should consult their service representatives at the gas or electric utility before undertaking this task.

#### **Odors:**

A heater which is recycled off/on or left off for a period of non-heating may develop offensive odors from sulfur bacteria. The odor, hydrogen sulfide - "rotten egg odor", may be drawn back through cold water faucets as well as the hot water faucet.

#### **Temperature Settings:**

The heater thermostat should be set at a reasonable temperature. Scalding of infants and the elderly can be a real hazard, even when the temperature setting is within proper limits. Again, the user should consult with their energy supplier to have the unit set at a safe temperature.

#### **White Plastic Particles:**

It is not unusual for the white plastic (PVC) filler tube inside the heater to disintegrate and discharge small white particles to the faucet aerator screens. These particles can come through not only the hot water lines but the cold water lines as well. These particles may appear to be soft and crumbly, but a good test is to heat this material with a match. PVC will melt; minerals, such as calcium will not.

### PROJECTS & IMPROVEMENTS in 2014

Hickory Creek SUD installed approximately 50,000 feet of new 8" line along County Road 1037, Farm to Market 1566 (between CR 1037 to FM 272) and Farm to Market 272. This installation will dramatically reduce the number of leaks in this area, keeping customers from having to do without water. We are already seeing a major reduction of leaks in this area. Also, saving revenue and resources that can be used in other areas of the district.

Three emergency generators were purchased in 2014. This will put Hickory Creek SUD in compliance with Texas Commission on Environmental Quality (TCEQ). We received an amazing offer on the three generators. The target wells were Sabine Well, Prairie Hill Well and Hogeys Well. Sabine Well was the priority well for the first generator. This would allow everyone to be able to get water if there was ever an electrical problem in the future. To date we have used the generator twice successfully.

The District has purchased the old R & K Wholesale building and lot behind our present location, which will increase our office and storage space by five times. This will allow us to better serve our customers. We are actively trying to sale the current office and shop.

Our district is really growing with new people moving to the area as of December 2014 we have 1,231 active accounts.

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?wtrsrc=>

Further details about sources and source-water assessments are available in Drinking Water Watch at the following URL: <http://dww.tceq.texas.gov/DWW>

Source Water / Name of Well	Location	Type of Water
HOGYEY 1 -	2470 FM 1566 W 2470 FM 1566 W	Ground Water
LANE 2 -	4290 FM 1562 4290 FM 1562	Ground Water
PRAIRIE HILL 3	8636 FM 1143 8636 FM 1143	Ground Water
SABINE 4	6803 CR 1145 6803 CR 1145	Ground Water

### 2014 Regulated Contaminants Detected

#### Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive monthly sample.	1		0	N	Naturally present in the environment.

#### Water Quality Test Results

- Definitions:** The following tables contain scientific terms and measures, some of which may require explanation.
- Avg:** Regulatory compliance with some MCLs are based on running annual average of monthly samples.
- 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.

#### Water Quality Test Results

- 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)
- na:** not applicable.
- NTU:** nephelometric turbidity units (a measure of turbidity)
- pCi/L:** picocuries 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.
- ppt:** parts per trillion, or nanograms per liter (ng/L)
- ppq:** parts per quadrillion, or picograms per liter (pg/L)

### Comparative Sizes ...

*parts per million & parts per billion*

One ppm or mg/L is equivalent to:

*(Cl2 residual, minerals & metals)*

- 1 penny out of \$10,000
- 1 minute out of 2 years
- 1 inch out of 16 miles



One ppb or ug/L is equivalent to:  
*(VOCs & SOCs)*

- 1 penny out of \$10,000,000
- 1 second out of 32 years



**Regulated Contaminants**

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Halooacetic Acids (HAA5)*	2014	7	7.4 - 7.4	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2014	21	20.8 - 20.8	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	2014	2.5	1.5 - 2.5	0	10	ppb	N	Erosion of natural deposits; Runoff from crochards; Runoff from glass and electronics production wastes.
Barium	2014	0.0081	0.004 - 0.0081	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium	2014	28	19 - 28	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
Fluoride	2014	2.34	1.12 - 2.34	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]	2014	0.085	0 - 0.085	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	2014	11	6.5 - 11	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.

**Violations Table**

E. coli			
Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITOR GWR TRIGGERED/ADDITIONAL, MAJOR	08/01/2014	08/01/2014	We failed to collect follow-up samples within 24 hours of learning of the total coliform-positive sample. These needed to be tested for fecal indicators from all sources that were being used at the time the positive sample was collected.

1 of 4 Samples tested positive. Later determined to be a bad sample bottle. During our follow up procedure we took 1 sample from our well source. New laws require a sample from all 4 well sources. Follow up showed all samples to be good.

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)	10/01/2011	2014	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.
LEAD CONSUMER NOTICE (LCR)	12/30/2013	02/23/2015	We failed to provide the results of lead tap water monitoring to the consumers at the location water was tested. These were supposed to be provided no later than 30 days after learning the results.

(1) This was a 2011 violation the state did not receive the reports in the allotted time period. (2) These test were OK, but we did not receive all the results to give the customers involved results within the 30 day time frame.

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 VIOLATION	11/10/2012	2014	We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations.
PUBLIC NOTICE RULE LINKED TO VIOLATION	02/13/2014	08/24/2014	We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations.
PUBLIC NOTICE RULE LINKED TO VIOLATION	12/11/2014	2014	We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations.

One of these was in 2012. The affected customers were not given a rescind notice on boiled water notices.

Total Coliform			
Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING (TCR), ROUTINE MAJOR	08/01/2014	08/31/2014	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.

The tests were conducted on time, all tests were OK. The state received the tests results one day late causing a violation.