

North Hardin Water Supply Corporation

Annual Drinking Water Quality Report

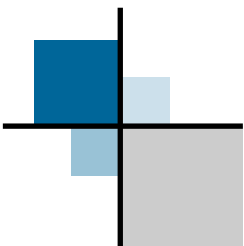
PWS: 1000015

Consumer Confidence Report

2016

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

TX1000015



Public Participation Opportunities

Date: Second Tuesday of Each Month

Time: 6:30 P.M.

Location: 5094 FM 92 North Silsbee, TX

Phone Number: (409) 385-7355

This report is intended to provide you with important information about your drinking water and the efforts made by North Hardin Water Supply Corp. to provide you with safe drinking water .

We strive to be efficient and maintain a level of service that our members deserve.

For more information regarding this report contact:
Bobby Rogers
409-385-7355

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (409) 385-7355.



Information about Source Water Assessments

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 based on this susceptibility and previous sample data. Any detections of these contaminants may be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system, contact Bobby Rogers at 409-385-7355.

Further details about sources and source-water assessments are available in Drinking Water Watch at the following URL: <http://dww2.tceq.texas.gov/DWW/>

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 at (800)-426-4791.

WHERE WE GET OUR DRINKING WATER

The source of drinking water used by North Hardin WSC is Ground Water taken from the Evangeline Aquifer.

SOURCE WATER NAME:

3-WELL PLANT 3 N/HWY 92

7829 POST PLANT RD SILSBEE TX

TYPE OF WATER= GW (ground water)

REPORT STATUS - ACTIVE DAILY USE

LOCATION - EVANGELINE AQUIFER

SOURCE WATER NAME:

4-WELL PLANT 4/REED RANCH RD

8470 REED RANCH RD

TYPE OF WATER=GW (ground water)

REPORT STATUS - ACTIVE DAILY USE

LOCATION - EVANGELINE AQUIFER

For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL:

<http://www.tceq.texas.gov/gis/swaview>

(http://www.nhwsc.com/ccr/ccr_2016.pdf)

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.



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. North Hardin 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 <http://www.epa.gov/safewater/lead>.

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.



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.

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.

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.

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 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)

na: not applicable.

mrem: milliremsper year (a measure of radiation absorbed by the body)

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.

Treatment technique or TT: A required process intended to reduce the level of a contaminant in drinking water.

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

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



2016 Regulated Contaminants Detected

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. ALGs allow for a margin of safety.

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

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites over AL	Units	Violation	Likely Source of Contamination
Copper	2016	1.3	1.3	0.195	0	ppm	N	Erosion of natural elements; leaching from wood reserves; corrosion of household plumbing systems
Lead	2016	0	15	.55	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Regulated Contaminants

Inorganic Contamination	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	9/5/2014	4.9	4.8-4.9	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium	9/5/2014	.379	0.299-0.379	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride	9/5/2014	0.1	0-0.1	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]	2016	0.01	0-0.01	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium	9/5/2014	5.3	0-5.3	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Radioactive Contaminates	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	2016	4.4	4.4-4.4	0	50	pCi/L*	N	Decay of natural and man-made deposits.

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

Combined Radium 226/228	2016	1.5	1.5-1.5	0	5	pCi/L		Erosion of natural deposits.
Gross alpha excluding radon and uranium	2016	4.6	4.6-4.6	0	15	pCi/L		Erosion of natural deposits.

Disinfectant	Year	Average Level	Min Level	Max Level	MRDL	MRDLG	Unit of Measure	Violation	Likely source of contamination
CL2	2016	1.29	.69	1.92	4	4	ppm	N	Water additive used to control microbes



In the water loss audit submitted to the Texas Water Development Board for the time period of Jan-Dec 2015, our system lost an estimated 17,527,428 gallons of water. If you have any questions about the water loss audit please call NHWSC at 409-385-7355

The North Hardin WSC Drought Contingency Plan

This plan is a requirement of the State Regulatory Guidelines. The NHWSC plan includes:

- Stage 1—Mild Water Conditions,
- Stage 2—Moderate to Severe Water Conditions,
- Stage 3—Critical Water Conditions
- Stage 4—Emergency Water Shortage Conditions

This plan details the pumping levels that trigger the different stages. We utilize pumping records, well production, and guides such as the Palmer Drought Index in determining the need for activation of our drought plan. As of this date, we have not had to implement the drought contingency plan at any stage. If it becomes necessary to implement our Drought Contingency Plan, there will be notification through the local newspaper, and/or inserts in the water bills, and in extreme emergencies, notification may also be made by direct mail to each customer. A complete copy of the Drought Contingency Plan may be obtained by visiting our office. We will be happy to answer any questions regarding this plan.



Being Prepared

With the approach of Hurricane season, and as we turn our thoughts to storm preparations, remember that in the event of an evacuation, a good option is to cut off the water service at the customer isolation valve located on the **customer side** of the meter. This will help stop water loss and stabilize water pressure. This procedure can apply to vacations or extended time away from your residence as well.

Using Water Wisely

Even though we have a solid supply of groundwater, we recognize the importance of protecting this valuable life sustaining source. We would like to encourage everyone to practice good water conservation management actions by utilizing their water wisely, and by assisting the NHWSC by reporting leaks, broken lines or leaking valves. This will enable us to continue to serve our customers with good quality water.