



PWS# TX1010007

Water Quality

REPORT 2022

Consumer Confidence Report for reporting year 2023



Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (281) 478-7236, Josue Escobar



Who do you call if you find a **water leak?**

If it is during business hours, call the Public Works Office at 281-478-7270. After hours, please call the non-emergency Police Department number, 281-479-1511. They will dispatch Public Works to the suspected leak.

2022 Water Quality Test Results (January 1 to December 31, 2022)

Disinfection By-Products

	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2022	31	12.7 - 50.8	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2022	29	19 - 33.4	No goal for the total	80	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. 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.

Inorganic Contaminants

	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2022	0.0435	0.0435 - 0.0435	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Cyanide	01/20/2021	80	80 - 80	200	200	ppb	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.
Nitrate [measured as Nitrogen]	2022	0.11	0.11 - 0.11	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Radioactive Contaminants

	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/positron emitters	01/20/2021	7.4	7.4 - 7.4	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.

Synthetic organic contaminants including pesticides and herbicides

	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Atrazine	09/10/2018	0.28	0.28 - 0.28	3	3	ppb	N	Runoff from herbicide used on row crops.
Di (2-ethylhexyl) phthalate	09/10/2018	0.83	0.83 - 0.83	0	6	ppb	N	Discharge from rubber and chemical factories.
Simazine	09/10/2018	0.15	0.15 - 0.15	4	4	ppb	N	Herbicide runoff.

Disinfectant Residual

Disinfectant Residual	Year	Average Level	Range of Levels Detected	MRDL	MRDLG	Unit of Measure	Violation	Source in Drinking Water
Total Chlorine	2022	1.90	.37 - 3.79	4	4	ppm	N	Water additive used to control microbes.

Turbidity

	Level Detected	Limit (Treatment Technique)	Violation	Likely Source of Contamination
Highest single measurement	0.16 NTU	1 NTU	N	Soil runoff.
Lowest monthly % meeting limit	100%	0.3 NTU	N	Soil runoff.

Information Statement: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

Lead and Copper

	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	08/12/2020	1.3	1.3	0.16	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	8/12/2020	0	15	0	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

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>.

Definitions and Abbreviations

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

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

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: picocuries per liter (a measure of radioactivity)

ppb: micrograms per liter or parts per billion

ppm: milligrams per liter or parts per million

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.

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 EPAs 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).

SOURCES OF WATER

City of Deer Park provides surface water from the Trinity River located in Liberty County and ground water from the Gulf Coast Aquifer located in Harris County. The water wells are designated for emergency use.

INFORMATION ABOUT SOURCE WATER

City of Deer Park purchases water from CITY OF HOUSTON. CITY OF HOUSTON provides purchase surface water from the Trinity River located in Liberty County. The purchased water is untreated water that is treated at the City of Deer Park Surface Water Treatment Plant.

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 Nicholas Cook, 281-478-7205.

The Surface Water Plant is run by ten (10) licensed water operators. Licensing is granted through the Texas Commission on Environmental Quality. Licenses are awarded with education and the ability to pass an examination with the A license being the highest license and the D license being a basic license.

Nicholas Cook is the Water Treatment Plant Supervisor. He has an A Water license, a BS in Biology from the University of Texas of the Permian Basin and a MBA in Environmental Management from the University of Houston Clear Lake. He has been in the water industry for 15 years having joined the city in 2016.

Matt Noland is the Assistant Supervisor. He has an A Water license and previously served as a laborer in sanitation before moving to the plant as the maintenance technician, C Water Operator, and B Operator. He has been with the City since 2007.

David Ortiz is the B Operator. He has a B Surface Water license and a C Ground Water license. He previously served the City as a meter reader, laborer for Fleet Maintenance, C Operator for the Ground Wells, and C Operator of the water plant. He has been with the City since 2009.

Frank Walker is the Lab Technician. He has a C Surface Water license. He previously served as a sanitation laborer and laborer at the Water Plant. He has been with the City since 2001.

Darrell McCoy is a C Operator. He has a C Surface Water license and is a veteran of the US Navy. He started with the city as a C Operator but has worked for other area municipalities in a variety of roles including P&R, line repair, and water treatment.

Dale Knotts is a C Operator. He has a C Surface Water license and a C Groundwater License and is a veteran of the US Army. He previously served as a Maintenance technician for the well sites before moving into operations. He has served the City since 2012.

Dan Shepherd is a C Operator. He has a C Surface Water license. He previously served as the Maintenance Technician at the Water Plant. He has been a member of the City staff since 2007.

David Turner is a C Operator. He has a C Surface Water license, an AAS from San Jacinto College and is a veteran of the US Army. He started with the City in 2019.

Jared Johnston is a C Operator. He has a C Surface Water license and an AAS from San Jacinto College. He started with the City in 2021.

Johnny Valdez is a C Operator and Maintenance Technician. He currently has a D Water License and primarily cares for the water wells, equipment, and facilities. He previously served as a Street and Drainage laborer and equipment operator. He has been with the City since 2012.

The City of Deer Park Water System is managed by 3 departments, the **Surface Water Treatment Plant**, the **Water/Sewer Maintenance Division**, and the **Meter Readers/Utility Billing**. The water plant treated a total of 1,306,036,000 gallons of water. That is 1.3 billion gallons! This water is stored in 5 1-Million Gallon Ground Storage Tanks and 3 ½-Million Gallon Elevated Storage Towers. The Water/Sewer Maintenance Division maintains 142 miles of Distribution lines and over 1,000 fire hydrants. The Meter Readers read over 12,000 water meters every month!



Water Treated

1.3 BILLION GALLONS



Water Storage

5 1 MILLION GALLON GROUND TANKS

3 500K GALLON ELEVATED TOWERS



We Maintain

142 MILES OF DISTRIBUTION LINES



1,000 FIRE HYDRANTS



12,000 WATER METERS

