JEFFERSON COUNTY WCID 10

Jefferson County WCID 10 Public Water System 1230003 provides Surface Water from the Lower Neches Valley Authority Sam Rayburn Reservoir.

PUBLIC PARTICIPATION OPPORTUNITY

Date: July 15, 2021

Time: 4:00pm

Location: Board Room

3707 Central Blvd Nederland, TX 77627

Phone: (409) 722-6922

Our Drinking Water is Regulated

This report is a summary of the quality of water we provide our customers. The analysis was made using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests. The tables below show only those contaminants that were detected in the water.

Where Do We Get Our Drinking Water?

The source of drinking water used by Jefferson County WCID 10 is Surface 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. Contaminants that may be present in source water before treatment 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.

All Drinking Water May Contain Contaminants

When drinking water meets federal standards there may not be any health-based benefits to purchasing bottled water or point of use devices. 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 (1-800-426-4791).

Secondary Contaminants

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.

Source Water Assessment

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 detection 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 Thomas McDonald at (409) 722-6922 or visit https://www.tceq.texas.gov/gis/swaview or https://dww2.tceq.texas.gov/DWW/

Required Additional Health Information for Lead and Copper

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 cannot control the variety of material 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. For information on lead in drinking water, testing methods, and steps you can take to minimize exposure call the Safe Water Hotline or http://www.epa.gov/safewater/lead.

Special Notice – (Required for all community public water supplies)

You may be more vulnerable than the general population of certain microbial contaminants, like 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 at (800) 426-4791.

Water Loss Statement

In the water loss audit submitted to the Texas Water Development Board for the time period of January-December 2020, our system lost an estimated 24,892,505 gallons.

En Español

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al teléfono (409) 722-6922

JEFFERSON COUNTY WCID 10								
2020 ANNUAL WATER QUALITY REPORT								
MAXIMUM RESIDUAL DISINFECTANT LEVEL	COLLECTION DATE	AVERAGE LEVEL	MINIMUM LEVEL	MAXLEVEL	MRDL	MRDLG	UNITS	SOURCE OF CONTAMINANT
Chloramines	2020	1.9	0.5	3.7_	4	4	ppm	Disinfectant used to control microbes.

LEAD AND COPPER	DATE	MCLG	ACTION LEVEL (AL)	90TH PERCENTILE	# SITES OVER AL	UNITS	VIOLATION	LIKELY SOURCE OF CONAMINATION
Соррег	2020	1.3	1.3	0.126	0	ppb	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing
Lead	2020	0	15	4.3	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

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.

REGULATED CONTAMINANTS	DATE	HIGHEST LEVEL DETECTED	RANGE OF LEVELS DETECTED	MCLG	MCL	UNITS	VIOLATON	LIKELY SOURCE OF CONAMINATION
Halo acetic Acids	2020	35.7	5-35.7	n/a	60	ppb	N	By-product of drinking water disinfection.
TTHMs (Total trihalomethanes)	2020	28.5	10.2-28.5	n/a	80	ppb	N	By-product of drinking water disinfection.
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INORGANIC CONTAMINANTS	DATE	HIGHEST LEVEL DETECTED	RANGE OF LEVELS DETECTED	MCLG	MCL	UNITS	VIOLATON	LIKELY SOURCE OF CONAMINATION
Barium	2020	0.0291	0.0291-0.0291	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Cyanide	2020	0.01 MG/L	0.01-0.01	200	200	ppb	N	Discharge from plastic and fertilizer factories;Discharge from steel/metal factories
Nitrate (measured as Nitrogen)	2020	0.2	0.2-0.2	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Atrazine	2020	0.1	0.1-0.1	3	3	ppb	N	Runoff from herbicide used on row crops.

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six (6) months old of age. High nitrate levels in drinking water can cause blue babe syndrome. Nitrate levels may rise quickly for short periods of time due to rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider. While you or drinking water meets EPA's standards for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low level of arsenic, which is a mineral know to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

	RADIOACTIVE CONTAMINANTS	DATE	HIGHEST LEVEL DETECTED	RANGE OF LEVELS DETECTED	MCLG	MCL	UNITS	VIOLATON	LIKELY SOURCE OF CONAMINATION
Ì	Combined radium 226/228	2/01/2016	1.5	1.5-1.5	0	5	pCi/L	N	Erosion of natural deposits.
76	*EPA considers 50 pCi/L to be the level of concern for beta particles								

Turbidity	DATE	LIMIT (TREATMENT TECHNIQUE	LEVELS DETECTED	MCLG	MCL	UNITS	VIOLATON	LIKELY SOURCE OF CONAMINATION
Highest Single Measurement	2020	1NTU	17 NTU	n/a	n/a	NTU	Υ	Soil runoff.
Lowest Monthly % of Samples Meeting Turbidity Limit	2020	.3NTU	94.7%	n/a	n/a	NTU	Y	Soil runoff.
otal Organic Carbon - The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violation								

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Violations

Interim Enhanced SWTR											
The Interim Enhanced Surface Water Treatment	nt Rule improves control of microbial con	ntaminants, particularly Cryptosporid	ium, in systems using surface water, or ground water								
under the direct influence of surface water. The	e rule builds upon the treatment technique	e requirements of the Surface Water 7	Treatment Rule.								
Violation Type	Violation Type Violation Begin Violation End Violation Explanation										
MONTHLY COMB FLTR EFFLUENT (IESWTR/LT1)	10/01/2020	10/31/2020	Turbidity levels, though relatively low, exceeded a standard for the month indicated. Turbidity (cloudiness) levels are used to measure effective filtration of drinking water.								
SINGLE COMB FLTR EFFLUENT (IESWTR/LT1)	10/01/2020	10/31/2020	One turbidity measurement exceeded a standard for the month indicated. Turbidity (cloudiness) levels are used to measure effective filtration of drinking water.								

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 is 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.

<u>Maximum Contaminant Level or MCL</u>: 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.

<u>Maximum residual disinfectant level or MRDL</u>: 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.

<u>Maximum residual disinfectant level goal or MRDLG</u>: 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)