2018 Annual Drinking Water Quality Report

(Consumer Confidence Report)

CITY OF TYE

Phone Number: 325.692.8588

SPECIAL NOTICE

Required language for ALL community public water supplies:

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 at (800) 426-4791.

Public Participation Opportunities

Date: 3rd Monday of each month
Time: 6:30 pm
Location: Tye City Hall
Phone Number: 325.692.8588

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

Our Drinking Water Meets or Exceeds All Federal (EPA) Drinking Water Requirements

This report is a summary of the quality of the water we provide our customers. The analysis was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

WATER SOURCES: 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: microbes, inorganic contaminants, pesticides, herbicides, radioactive contaminants, and organic chemical contaminants.

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. (325)692 - 8588 - para hablar con una persona bilingüe en español.

Where do we get our drinking water?

Our drinking water is obtained from SURFACE water sources. It comes from the following Lake/River/Reservoir/Aquifer: O H IVIE RESERVOIR, LAKE FORT PHANTOM HILL, HUBBARD CREEK LAKE. A Source Water Susceptibility Assessment for your drinking water sources(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 our source water protection strategies. Some of this source water assessment information will be available later this year on Texas Drinking Water Watch at http://dww.tceq.state.tx.us/DWW/ . For more information on source water assessments and protection efforts at our system, please contact us.

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 Constituents

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, secondaries are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

About The Following Pages

The pages that follow list all of the federally regulated or monitored contaminants which have been found in your drinking water. The U.S. EPA requires water systems to test for up to 97 contaminants.

DEFINITIONS

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

Maximum Contaminant Level Goal (MCLG)
The level of a contaminant in drinking water below which there is no known or expected health risk. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL)
The highest level of 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 (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 contamination.

Treatment Technique (TT)
A required process intended to reduce the level of a contaminant in drinking water.

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

ABBREVIATIONS

NTU - Nephelometric Turbidity Units
MFL - million fibers per liter (a measure of asbestos)
pCi/L - picocuries per liter (a measure of radioactivity)
ppm - parts per million, or milligrams per liter (mg/L)
ppb - parts per billion, or micrograms per liter (µg/L)
ppt - parts per trillion, or nanograms per liter
ppq - parts per quadrillion, or picograms per liter

Type of contaminant	Year or Range	Contaminant (unit of measure)	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Violation	Source of Contaminant
Inorganic Contaminants	2018	Arsenic (ppb)	< 1 0	< 1 0	10	0	N	Erosion of natural deposits
	2018	Barium (ppm)	0 160	0 15-0 16	2	2	N	Discharge from plastic and fertilizer factories, Discharge from steel/metal factories
	2018	Cyanide (ppb)	89	45-89	200	200	N	Discharge from plastic and fertilizer factories, Discharge from steel/metal factories
	2018	Fluoride (ppm)	0 802	0 624-0 802	4	4 0	N	Erosion of natural deposits, water additive for strong teeth, discharge from fertilizer and aluminum factories
	2018	Nitrate (ppm)	0 52	15- 52	10 00	10	N	Erosion of natural deposits, runoff from fertilizer use, leaching from septic tanks or sewage
	2018	Selenium (ppb)	< 5 0	< 5 0	50 0	50	N	Erosion from natural deposits, discharge from petroleum refineries
Radioactive Contaminants	2014	Beta/proton Emitters (pCi/L)	11 5	11 5-11 5	0	50	N	Erosion of natural deposits Decay of natural and man made deposits
	2017	Gross Alpha	3 4	<3 0 - 3 4	na	na	N	Erosion of natural deposits Decay of natural and man made deposits
	2017	Gross Beta	8 8	6 2 - 8 8	na	na	N	Erosion of natural deposits Decay of natural and man made deposits.
	2017	Radium 228 (pCi/L)	<1 0	<1 0	0	5	N	Erosion of natural deposits Decay of natural and man made deposits
	2017	Uranium (mg/L)	0 0023	<0 0010 - 0 0023	0	na	N	Byproduct of drinking water disinfection
Disinfection Byproducts	2018	Total Haloacetic Acids (ppb)	24	13 7-24 0	No goal for the total	60	N	Byproduct of drinking water disinfection
	2018	Total Trihalomethanes (ppb)	75 8	8 4-75 8	No goal for the total	80	N	Byproduct of drinking water disinfection
	2018	Chlorite (ppm)	0 95	<0 01 - 0 95	0 8	1	N	Byproduct of drinking water disinfection
Unregulated Contaminants	2018	Chloroform (ppb)	<1 00	< 1 0 - 4 0	na	na	na	Byproduct of drinking water disinfection
	2018	Bromoform (ppb)	25 1	6 42-25 1	na	na	na	Byproduct of drinking water disinfection
	2018	Bromodichloromethane (ppb)	3 95	2 44-3 95	na	na	na	Byproduct of drinking water disinfection
	2018	Dibromochloromethane (ppb)	13 6	4 77-13 6	na	na	na	Byproduct of drinking water disinfection
	2018	4-methyl-2-pentanone (ppb)	0 67	< 0 5 - 0 67	na	na	na	Byproduct of drinking water disinfection
	2018	Trichloroacetic Acid (ppb)	<1 00	<1 00-<1 00	na	na	na	Byproduct of drinking water disinfection

Type of Treatment	Year or Range	Disinfectant Used	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Source of Chemical
MRDL	2018	Chloramines (ppm)	1 87	0 5	3 0	4 0	4 0	Disinfectant used to control microbes

Type of contaminant	Year or Range	MCGL	The 90th Percentile	Number of sites Exceeding Action Level	Action Level	Source of Contaminant	No Violations for Lead or Copper
Lead (ppb)	2017	0	0 5	0	15	Corrosion of household plumbing systems, erosion of natural deposits	
Copper (ppm)	2017	1 3	0 40	0	1 3	Corrosion of household plumbing systems, erosion of natural deposits	

Type of contaminant	Year or Range	Highest Single Level Detected	Lowest Monthly % of Samples Meeting Limits	Limit (Treatment Technique)	Lowest Monthly % meeting limit	Violation	Source of Contaminant
Turbidity (NTU)	2018	0 17	100.00%	1	0 3	N	Soil runoff

Type of contaminant	Year or Range	Contaminant Source	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
Total Organic Carbon	2018	Source Water	6 23	5 10	8 70	ppm	Naturally present in environment
	2018	Drinking Water	3 94	2 10	8 50	ppm	Naturally present in environment

Type of contaminant	Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	MFL	Construction Materials
Asbestos	2012	Asbestos	ND	ND	ND	7	

Type of contaminant	Year or Range	Contaminant	Highest Monthly % of Positive Samples	MCL	Unit of Measure	Source of Contaminant	
Total Coliform	2018	Total Coliform Bacteria	0	*	Presence	No Monitoring violation	Naturally present in environment

* Presence of Coliform bacteria in 5% or more of the monthly samples.

Organic Contaminants - none detected	Fecal Coliform - not detected	Real Water Loss %

Type of contaminant	Year or Range	Contaminant (unit of measure)	Average Level	Minimum level	Maximum Level	Secondary Limit	Source of Contaminant
Secondary	2018	Aluminum (ppm)	24	<5	37	0 05	Naturally present in environment.
and other	2018	Bicarbonate (ppm)	132	114	142	na	Corrosion of carbonate rocks such as limestone
Constituents	2018	Calcium (ppm)	67 9	48 3	103	na	Naturally present in environment.
not	2018	Chloride (ppm)	146	79 2	252	300	Naturally present in environment
Regulated	2018	Copper (ppm)	0 0021	0 0015	0 0026	1 0	Corrosion of household plumbing, erosion from natural deposits, leaching from wood preservatives
	2018	Magnesium (ppm)	27 7	17 3	47 7	na	Naturally present in environment.
	2018	Manganese (ppm)	0 005	0 002	0 009	0 05	Naturally present in environment.
	2018	Nickel (ppm)	0 0023	0 0018	0 0034	na	Erosion of natural deposits
	2018	pH (units)	8 0	7 7	8 4	>7 7	Measure of corrosivity of water
	2018	Sodium (ppm)	92	64 2	143	na	Erosion of natural deposits, byproduct of oil field activity
	2018	Sulfate (ppm)	151	73 1	305	300	Naturally occurring, common industrial byproduct, byproduct of oil field activity
	2018	Total Alkalinity as $CaCO_3$ (ppm)	132	114	142	na	Naturally occurring soluble mineral salts
	2018	Total Dissolved Solids (ppm)	582	400	934	1000	Total dissolved mineral constituents in water.
	2018	Total Hardness as $CaCO_3$ (ppm)	284	195	454	na	Naturally occurring calcium
	2018	Conductivity (uhmos/cm)	1013	705	1560	na	Naturally present in environment
	2018	Potassium (mg/L)	8 71	7 67	9 35	na	Naturally present in environment
	2018	Lead (mg/L)	<0 001	<0 001	<0 001	15	Corrosion of household plumbing, erosion from natural deposits, leaching from wood preservatives
	2018	Di(2-ethylhexyl) phthalate	0 6	< 0 5	1 9	6	Discharge from plastic factories

Definitions and Abbreviations: The following table contain scientific terms and measures, some may require explanation

ppm – parts per million or milligrams per liter (mg/L) One ounce in 7 350 gallons of water

ppb – parts per billion or micrograms per liter (µg/L) One ounce in 7,350,000 gallons of water.

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

Maximum Contaminant Level Goal (MCLG) - The level of a substance in drinking water below which there is no known or expected health risk. MCLGs allow for a margin of safety

Treatment Technique (TT) - A required process intended to reduce the level of a substance in drinking water.

MFL - million fibers per liter (a measure of asbestos)

NTU – Nephelometric turbidity units. Unit of measure of the turbidity (cloudiness) of the water

pCi/L – picocuries per liter. (a measure of radioactivity)

Maximum Residual Disinfectant Level (MRDL) – The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants

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Action Level (AL) – the concentration of a substance, which, if exceeded, triggers treatment or other requirements which a water system must follow

J - Analyte detected below the quantitation limit but above the detection limit.

ND - Analyte not detected in sample

na - not applicable