

2014 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: OHIVIE RESERVOIR, LAKE FORT PHANTOM HILL, HUBBARD CREEK LAKE. The TCEQ has completed a Source Water Assessment for all drinking water systems that own their sources. The report 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 system(s) from which we purchase our water received the assessment report. For more information on source water assessments and protection efforts at our system, contact Jerry Perkins, Public Works Director, City of Tye.

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 by then 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 (ug/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 Levels Detected	Range of Levels Detected	MCLG	MCL	Violation	Source of Contaminant
Inorganic Contaminants	2014	Arsenic (ppb)	3	0-2.7	10	0	N	Erosion of natural deposits
	2014	Barium (ppm)	0.277	0.171-0.277	2	2	N	Discharge from plastic and fertilizer factories; Discharge from steelmill factories.
	2014	Cyanide (ppm)	100	110-140	200	200	N	Discharge from plastic and fertilizer factories; Discharge from steelmill factories.
	2014	Fluoride (ppm)	0.5	0.24-0.53	4	4.0	N	Erosion of natural deposits; water additive for strong teeth; discharge from fertilizer and aluminum factories
	2014	Nitrate (ppm)	1	0.16-0.73	10.00	10	N	Erosion of natural deposits; runoff from fertilizer user; leaching from septic tanks or sewage
	2014	Selenium (ppb)	10.0	5.8-7.9	50.0	50	N	Erosion from natural deposits; discharge from petroleum refineries
Radioactive Contaminants	2014	Radium-226 (pCi/L)	11.5	11.5-11.5	0	50	N	Erosion of natural deposits; Decay of natural and man made deposits.
	2011	Combined Radium 226/228	3.2	1-3.2	0	5	N	Byproduct of drinking water disinfection
Distillation Byproducts	2014	Total Halocarbon Acids (ppb)	15	8.8-25.7	No goal for the total	60	N	Byproduct of drinking water disinfection
	2014	Total Trihalomethanes (ppb)	45	28.8-83.4	No goal for the total	80	N	Byproduct of drinking water disinfection
Unregulated Contaminants	2014	Chlorine (ppm)	0.43	0-0.53	0.8	1	N	Byproduct of drinking water disinfection
	2014	Chloroform (ppb)	0.97	ND	2.9	na	na	Byproduct of drinking water disinfection
	2014	Bromodichloromethane (ppb)	4.4	1.5	10	na	na	Byproduct of drinking water disinfection
	2014	Dibromochloromethane (ppb)	11.2	5.3	22	na	na	Byproduct of drinking water disinfection
Type of contaminant	Year or Range	Contaminant (unit of measure)	Average Level	Minimum Level	Maximum Level	Secondary Limit	Source of Contaminant	
Secondary and other Constituents not regulated	2014	Aluminum (ppm)	0.008	ND	0.024	0.05	Naturally present in environment.	
	2014	Bicarbonate (ppm)	139	131	155	na	Corrosion of carbonate rocks such as limestone.	
	2104	Calcium (ppm)	80.7	72.5	96.4	na	Naturally present in environment.	
	2014	Chloride (ppm)	287	233	315	300	Naturally present in environment.	
	2014	Copper (ppm)	0.0007	0	0.0022	1.0	Corrosion of household plumbing; erosion from natural deposits; leaching from wood preservatives.	
	2014	Magnesium (ppm)	32.4	27.1	42.9	na	Naturally present in environment.	
	2014	Manganese (ppm)	0.0068	0.0058	0.0081	0.05	Naturally present in environment.	
	2014	Nickel (ppm)	0.0028	0.0024	0.0033	na	Erosion of natural deposits.	
	2014	pH (units)	8.1	7.9	8.3	>7.0	Measure of corrosivity of water.	
	2014	Sodium (ppm)	141	116	154	na	Erosion of natural deposits; byproduct of oil field activity.	
	2014	Sulfate (ppm)	167	121	256	300	Naturally occurring; common industrial byproduct; byproduct of oil field activity.	
	2014	Total Alkalinity as CaCO ₃ (ppm)	114	107	127	na	Naturally occurring soluble mineral salts.	
	2014	Total Dissolved Solids (ppm)	813	787	848	1000	Total dissolved mineral constituents in water.	
	2014	Total Hardness as CaCO ₃ (ppm)	335	293	417	na	Naturally occurring calcium.	
	2014	Conductivity (microhm/cm)	1620	1600	1660	na	Naturally present in environment.	
	2014	Potassium (mg/L)	11.2	6.5	13.5	na	Naturally present in environment.	
Type of Treatment	Year or Range	Disinfectant Used	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Source of Chemical
MRDL	2014	Chloramines (ppm)	3.2	0.5	4.2	4.0	4.0	Disinfectant used to control microbes
Type of contaminant	Year or Range	MCLG	The 90th Percentile	Number of sites Exceeding Action Level	Source of Contaminant			
Lead (ppb)	2012	0	1.75	0	15			Corrosion of household plumbing systems; erosion of natural deposits.
Copper (ppm)	2012	1.3	0.228	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)	2014	0.4	99.47%	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	2014	Source Water	9.4	7.50	12.30	ppm	Naturally present in environment.	
Drinking Water	2014	Drinking Water	6.90	5.30	8.90	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	2014	Total Coliform Bacteria	4.2		Presence	NO violations present in environment.		
Organic Contaminants - none detected		Fecal Coliform - not detected				Real Water Loss 6.4%		

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 continuing 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 contaminants.

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.

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	Fecal Coliform or E. Coli MCL: A routine sample and a repeat sample are total coliform positive, and one is also fecal coliform or E. coli positive.	0	N	Naturally present in the environment.

Regulated Contaminants for City of Tye

Disinfectants and Disinfection By-Products	Collection Date	Highest Level	Range of Levels	MCLG	MCL	Units	Violation	Likely Source of Contamination
Halacetic Acids (HAA5)*	2014	16	4.1 - 24.9	No goal for		ppb	N	By-product of drinking water
Total Trihalomethanes (TTHM)	2014	47	37.1 - 66.2	No goal for		ppb	N	By-product of drinking water
Inorganic Contaminants	Collection Date	Highest Level	Range of Levels	MCLG	MCL	Units <td>Violation</td> <td>Likely Source of Contamination</td>	Violation	Likely Source of Contamination
Nitrate [measured as Nitrogen]	2014	0.17	0.16 - 0.17	10		ppm	N	Runoff from fertilizer use; Leaching
Nitrite [measured as Nitrogen]	2014	0.01	0.01 - 0.01	1		ppm	N	Runoff from fertilizer use; Leaching

Disinfectant	Year	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Violation (Y/N)	Likely Source of Contamination
Chloramine	2014	1.0	.52	2.1	4	4	ppm	N	Water additive used to control microbes.