CITY OF LAWN 2023 Annual Drinking Water Report

(Also known as the Consumer Confidence Report)

Water System Identification Number — TX2210005

Annual Water Quality Report for the period of January 1 to December 31, 2023

City of Lawn Water Dept. purchases water from the City of Abilene which obtains water from Lake Fort Phantom, Lake OH Ivie, Hubbard Creek Lake, & Lake Abilene.

For more information regarding this report contact: Roger Coxe, Director at (325) 583-2510

Este reporte incluye informacion sobre el agua para tomar. Para asistencia en espanol, favor de llamar at telephono (325) 583-2510

PUBLIC PARTICIPATION OPPORTUNITIES AT COUNCIL MEETINGS

Date: Second Double digit Tuesday each month. Time: 7:00 pm

Note — The meeting time and date may change due to conflicting community events

Location: City Hall office — 150 Main St. Lawn, Texas

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 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 amounts 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).

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.

Information about Source Water Assessments

TCEQ completed an assessment of your source water, and results indicated 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 the source water assessments and protection efforts at our system, please contact Roger Coxe, Director at (325) 583-2510.

Avg: Regulatory compliance with some MCI-s 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 **Water Quality Test Results Explanation of Acronyms Used in this Report**: The following tables contain scientific terms and measures, some of which may require explanation.

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.

Level I 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.

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

MFL: million fibers per liter (a measure of asbestos**)** **na**: not applicable **mrem**: millirems per year (a measure of radiation absorbed by the body) **NTI**J: nephelometric turbidity units (a measure of turbidity) **ppb**: micrograms per liter or parts per billion-or one ounce in 7,350,000 gallons of water. **ppt**: parts per trillion. or nanograms per liter (ng/L) ppm: milligrams per liter or parts per million-or one ounce in 7,350 gallons of water. **ppq:** parts per quadrillion, or picograms per liter (pg/L)

Disinfectant Chloramine levels Testing | Results in the Lawn Water System

Disinfectant	Year of Range	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measurement	Violation	Source of Chemical
Chloramines	2023	2.97	1.37	3.85	4.0	4.0	ppm	N	Disinfectant used to control microbes

Total Organic Carbon for Lawn

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 violations section.

Turbidity

	Level Detected	Limit (Treatment Technique)	Violation	Likely Source of Contamination
Highest single measurement	0 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.

Regulated Contaminants Detected Copper Definitions:

Acton 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	2023	1.3	1.3	0.053	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

Regulated Contaminants Lawn Treatment

Disinfection By-Products	Collection Date	Highest Level Detected	Range of Individual Sam les	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAAS)	2023	20	12-22	No goal for the total	60	ppb	N	By-product of drinking water disinfection,
Total Trihalomethanes (TTHM)	2023	72	43.8 - 70.8	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	11/30/2021	0.11	0.11 – 0.11	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Cyanide	09/13/2022	73.9	73.9 – 73.9	200	200	ppb	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.
Fluoride	11/30/2021	0.156	0.156 - 0. 156	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]	2023	0.218	0.17 - 0.218	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Beta/photon emitters	08/07/2018	8.5	8.5 – 8.5		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.

Violations Lawn

Revised Total Coliform Rule (RTCR)			
The Revised Total Coliform Rule (RTCR) seeks to prevent waterborne diseases caused by E. coli. E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children,			
Violation Type	**Violation Begin**	**Violation End**	**Violation Explanation**
MONITORING, ROUTINE, MAJOR (RTCR)	04/1/2023	04/30/2023	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

2023 Water Loss Audit Information

Time Period Covered by Audit	Estimated Gallons of Water Lost During 2022	Comments and/or Explanations
January to December 2023	19,793,885	Most of the water lost during 2023 was the result of flushing to maintain water quality or leaks in the distribution s stem

THE CITY OF LAWN purchases water from CITY OF Abilene. Abilene treat surface water from West Central Texas MWD, Lake Fort Phantom, Lake Ivie, Hubbard, Creek Lake, & Lake Abilene as a reserve.

We are required to include the CCR for monitored contaminates and water quality samples that are shown below in this report for 2023

Information about Source Water

TCEQ completed an assessment of the 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 for the Abilene system contact the City of Abilene Water Dept.

Disinfectant Chloramine levels Testing Results City of Abilene

Disinfectant	Year of Range	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measurement		Violation	Source of Chemical
Chloramines	2023	3.7	0	4.4	4.0	4.0	ppm		N	Disinfectant used to control microbes

Turbidity

	Level Detected	Limit (Treatment Technique)	Violation	Likely Source of Contamination
Highest single measurement	0.19 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.

Type of Contaminant	Year or Range	Contamination Source	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
Total Organic Carbon	2022	Source Water	9.02	6/70	13	ppm	Naturally present in environment.
Total Organic Carbon	2022	Drinking Water	5.22	2.99	7.94	ppm	Naturally present in environment.
Asbestos	2012	Asbestos	ND	ND	ND	7	Construction Materials

Coliform Bacteria Testing Results for the City of Abilene.

Continued

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 Contaminant
0	5% of monthly samples are positive.	0.9	*	0	N	Naturally present in the environment.

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

Regulated Contaminants Detected Copper Definitions: City of Abilene

Acton 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	07/30/2020	1.3	1.3	0.249	0		N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

Regulated Contaminants in the Source Water — City of Abilene

Disinfection By-Products	Collection Date	Highest Level Detected	Range of Individual Sam les	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorite	2023	0.693	0.- 693	0.8	1	ppm	N	By-product of drinking water disinfection.
Haloacetic Acids (HAAS)	2023	21	11.5 - 25.1	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2023	65	16.3 - 80.6	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2023	0.2	0.18 – 0.2	2	2	ppb	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Cyanide	2023	147	65.7-147	200	200	ppb	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.
Fluoride	2023	0.8	0.691 -0.8	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Selenium	2023	<5.0	<5.0	50.0	50	ppb	N	Erosion of natural deposits Discharge from petroleum refineries
Nitrate [measured as Nitrogen]	2023	0.29	0.237-29	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/photon emitters	2023	10.7	7.7-10.7	0	50	pCi/L*	N	Decay of natural and man-made deposits.

•**EPA considers SO pCi L to be the level Of concern for beta particles**.

Uranium	2020	1.9	1.9 - 1.9		30	ug/l		Erosion of natural deposits.
Gross Alpha	2020	<3.0	<3.0	0	15		N	Erosion of natural deposits Decay of natural and man made deposits.
Gross Beta	2020	6.6	6.6	na	na		N	Erosion of natural deposits Decay of

								natural and man made deposits
Radium 228 (pCi/L)	2020	2.3	0-2.3	0	5		N	Erosion of natural deposits Decay of natural and man made deposits
Uranium (ug/L)	2017	2.9	0-2.9	0	30		N	Erosion of natural deposits Decay of natural and man made deposits
Unregulated Contaminants	**Collection Date**	**Contaminate (unit of measure)**	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Type	**2023**	**Chloroform (ppb)**	**1.65**	**<1.0 - 1.65**	na	na	na	**Byproduct of drinking water disinfection**
	2023	**Bromoform (ppb)**	27.5	**8.83-27.5**	na	na	na	**Byproduct of drinking water disinfection**
	2023	**Bromodichloromethane (ppb)**	**4.91**	**2.32-4.91**	na	na	na	**Byproduct of drinking water disinfection**
	2023	**Dibromochloromethane (ppb)**	**8.95**	**6.39-8.95**	na	na	na	**Byproduct of drinking water disinfection**
Type	**Year or Range**	**Contaminate (unit of measure)**	**Average Level**	**Minimum Level**	**Max Level**	**Secondary Limit**	**Source of Contaminant**	

Coliform Bacteria City of Abilene

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	5% of monthly samples are positive.	0.9		0	N	Naturally present in the environment.

Disinfectant Chloramine levels Testing **Results Abilene**

Disinfectant	Year of Range	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measurement	Violation	Source of Chemical
Chloramines	2023	3.9	1.7	4.0	4.0	4.0	ppm	N	Disinfectant used to control microbes

The UCMR program was developed in coordination with the Contaminant Candidate List (CCL). The CCL is a list of contaminants that are not regulated by the National Primary Drinking Water Regulations, are known or anticipated to occur at public water systems and may warrant regulation under the Safe Drinking Water Act. Data collected through UCMR are stored in the National Contaminant Occurrence Database (NCOD) to support analysis and review of contaminant occurrence, to guide the CCL selection process and to support the Administrator's determination of whether to regulate a contaminant in the interest of protecting public health.

Analyte	CAS Number	High	Range	Contaminant Classification
PFBA (ppb)	CAS 375-22-4	0.014	0.006-0.014	PFAS
PFPeA (ppb)	CAS 2706-90-3	0.018	0.000-0.018	PFAS
PFBS (ppb)	CAS 375-73-5	0.007	0.006-0.007	PFAS
PFHxA (ppb)	CAS 307-24-4	0.0217	0.00311-0.0217	PFAS
PFHpA (ppb)	CAS 375-85-9	0.01	0.000-0.010	PFAS
PFHxS (ppb)	CAS 335-46-4	0.028	0.009-0.028	PFAS
PFOA (ppb)	CAS 335-67-1	0.00749	0.00000-0.00749	PFAS
PFOS (ppb)	CAS 1763-23-1	0.030	0.0000-0.030	PFAS
Lithium (ppm)	-	48	< 9.0-48	Metals/Pharmaceuticals