

2023 Consumer Confidence Report for Public Water System CALLAHAN COUNTY WSC

(Also known as Annual Drinking Water Report)

Water System Identification Number: TX0300015

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

Callahan County WSC purchases treated water from:

City of Clyde which treats surface water from Clyde Lake, and who at times,
purchases water from the City of Abilene

City of Baird which treats water from Baird Lake, and who at times,
purchases water from the City of Abilene.

For more information regarding this report, contact:

Danise Weise at 325-893-3841

Este reporte incluye información importante sobre el agua para tomar.

Para asistencia en español, favor de llamar al telefono 325-893-3841.

**PUBLIC PARTICIPATION OPPORTUNITIES AT
MONTHLY BOARD OF DIRECTORS MEETING**

Date: Fourth Monday of Each Month

Time: 5:30 PM

Location: Office Location of
218 N Access Rd.
Clyde, TX 79510

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 EPA's 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).

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

CALLAHAN COUNTY WSC purchases water from CITY OF CLYDE. CITY OF CLYDE provides surface water from **Clyde Lake, Callahan County**, which they treat, as well as, provides purchase surface water from **City of Abilene, Taylor County**, which treats surface water from lake Ft Phantom, Lake Ivie and Hubbard Creek Lake.

CALLAHAN COUNTY WSC purchases water from CITY OF BAIRD. CITY OF BAIRD provides surface water from **Baird Lake, Callahan County**, which they treat, as well as, provides purchase surface water from **City of Abilene, Taylor County**, which treats surface water from lake Ft Phantom, Lake Ivie and Hubbard Creek Lake.

TCEQ completed a Source Water Susceptibility for all drinking water systems that own their sources. This report describes the susceptibility and types of constituents that may come into contact with the 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 **Danise Weise 325-893-3841**.

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	0.138	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2023	0	15	5.82	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

2023 Water Quality Test Results

Disinfection By-Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2023	53	0 - 60.9	No goal for the total	60	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

Total Trihalomethanes (TTHM)	2023	199	33 - 286	No goal for the total	80	ppb	Y	By-product of drinking water disinfection.
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*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
Nitrate [measured as Nitrogen]	2023	0.44	0.252 - 0.44	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Nitrite [measured as Nitrogen]	2023	1	0 - 0.652	1	1	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Disinfectant Residual

Disinfectant Residual	Year	Average Level	Range of Levels	MRDL	MRDLG	Unit of Measure	Violation (Y/N)	Source in Drinking Water
Chloramines	2023	1.59	0.51-4.40	4	4	ppm	N	Water additive used to control microbes.

Violations

Total Trihalomethanes (TTHM)			
Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MCL, LRAA	01/01/2023	03/31/2023	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.
MCL, LRAA	04/01/2023	06/30/2023	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.
MCL, LRAA	07/01/2023	09/30/2023	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.
MCL, LRAA	10/01/2023	12/31/2023	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.

Violation Explanation: Total Trihalomethanes (TTHM)

We have been working diligently to lower the TTHMs in the far reaches of our distribution system. These improvements have included the installation of aeration equipment and frequent flushing of the main lines in the Rowden area. Given time to work, we believe this treatment and flushing program will result in a reduction of the TTHM levels. In addition, we are working with our engineering firm for resolution.

Definitions and Abbreviations

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.

City of Clyde 2023 Annual Drinking Water Report

(Also known as the Consumer Confidence Report)

Water System Identification Number – TX0300002

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

City of Clyde treats water from Clyde Lake and also purchases treated surface water from the City of Abilene which treats surface water from Lake Fort Phantom, Lake Ivie and Hubbard Creek Lake

*For more information regarding this report contact: Elijah Garcia, City Administrator, at (325) 893-4234
Este reporte incluye informacion sobre el agua para tomar. Para asistencia en espanol, favor de llamar al telefono (325) 893-4234.*

PUBLIC PARTICIPATION OPPORTUNITIES -CITY COUNCIL MEETINGS

Date: Second Tuesday of every other month. **Time:** 7:00 pm

Location: City Hall – 222 Oak Street, Clyde, Texas

Sources of Drinking Water

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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).

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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 Christopher McGuire, City Administrator, at (325) 893-4234.

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.

Avg: Regulatory compliance with some MCLs 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 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 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.

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)

mrem: millirems per year (a measure of radiation absorbed by the body)

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

na: not applicable

NTU: 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.

ppm: milligrams per liter or parts per million-or one ounce in 7,350 gallons of water.

ppt: parts per trillion, or nanograms per liter (ng/L)

ppq: parts per quadrillion, or picograms per liter (pg/L)

Disinfectant (Chloramine) Levels Testing Results in the City of Clyde Distribution System

Disinfectant	Year of Range	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measurement	Violation	Source of Chemical
Chloramines	2023	4.1	0.9	6.6	4.0	4.0	ppm	N	Disinfectant used to control microbes.

Microbiological (Coliforms) Testing Results in the City of Clyde System

Type of Contaminant	Sample Year	Total Coliform Maximum Contaminant Level	Total Number of Positive Total Coliform Samples During the Year	E. coli Maximum Contaminant Level	Total Number of Positive E. coli Samples	Violation	Likely Source of Contaminant
Coliform bacteria	2023	Two or more samples collected in a month which are Total Coliform Positive	0	0	0	N	Naturally present in environment

2023 Water Loss Audit Information

Time Period Covered by Audit	Estimated Gallons of Water Lost During 2023	Comments and/or Explanations
January to December 2023	7,402,044	Most of the water lost during 2023 was the result of flushing to maintain water quality or leaks in the distribution system.

Regulated Contaminants Detected

Lead and Copper

Definitions:

Action 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)	90 th Percentile	#Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	07/08/2022	1.3	1.3	0.131	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

Regulated Contaminants in the City of Clyde Distribution System

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2023	32	15.7-43.3	No goal for total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2023	65	44.3-82.3	No goal for 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
Arsenic	2023	1	1.4 - 1.4	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2023	0.18	0.18- 0.18	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.

Cyanide	11/30/2021	270	270 - 270	200	200	ppb	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.
Fluoride	2023	0.1	0.126 - 0.126	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	0.694	0.258 - 0.694	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Nitrite [measured as Nitrogen]	2023	0.343	0 - 0.343	1	1	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	06/22/2017	9.7	9.7 - 9.7	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.

Turbidity

	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	0.79 NTU	1 NTU	N	Soil runoff.
Lowest monthly % meeting limit	94%	0.3 NTU	Y	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.

CITY OF CLYDE purchases water from CITY OF ABILENE. CITY OF ABILENE provides purchase surface water from WEST CENTRAL TEXAS MWD located in STEPHENS county.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90 th Percentile	#Sites over AL	Units	Violation	Likely Source of contamination
Copper	2023	1.3	1.3	0.249	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

Regulated Contaminants in the Source Water – City of Abilene

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorite	2023	0.693	0 - 0.693	0.8	1	ppm	N	By-product of drinking water disinfection.
Haloacetic Acids (HAA5)	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	ppm	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 steel and pulp mills; Erosion of natural deposits.
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.
Nitrate [measured as Nitrogen]	2023	0.29	0.237 - 0.29	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.
Uranium	2023	2.9	0-2.9	0	30	Ug/l	N	Erosion of natural deposits.

* EPA considers 50 pCi/L to be the level of concern for beta particles.

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.

Total Organic Carbon

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set.

Violations – City of Clyde

Chlorite			
<p>Some infants and young children who drink water containing chlorite in excess of the MCL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorite in excess of the MCL. Some people may experience anemia.</p>			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE (DBP), MAJOR	01/01/2023	01/31/2023	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.

Violations- City of Abilene

Chlorite			
<p>Some infants and young children who drink water containing chlorite in excess of the MCL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorite in excess of the MCL. Some people may experience anemia.</p>			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE (DBP), MAJOR	01/01/2023	01/31/2023	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.

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(Also known as the Consumer Confidence Report)
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For more information regarding this report contact: Lori Higgins at (325) 854-1212

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PUBLIC PARTICIPATION OPPORTUNITIES AT CITY COUNCIL MEETINGS

Date: Third Tuesday of every other month. **Time:** 6:00 pm

Location: City Hall – 328 Market Street, Baird, Texas

Sources of Drinking Water

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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 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.

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)

mrem: millirems per year (a measure of radiation absorbed by the body)

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

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)

na: not applicable

NTU: 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)

Disinfectant (Chloramine) levels Testing Results in the City of Baird Distribution System

Disinfectant	Year of Sample Range	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measurement	Violation	Source of Chemical
Chloramines	2023	1.43	1.84	1.46	4.0	4.0	ppm	N	Disinfectant used to control microbes

Microbiological (Coliforms) Testing Results in the City of Baird System

Type of Contaminant	Sample Year	Total Coliform Maximum Contaminant Level	E. coli Maximum Contaminant Level	Total Number of Positive E. coli or Total coliform Samples	Violation	Likely Source of Contaminant
Coliform bacteria	2023	1 or more monthly samples which are Total Coliform positive	2	2	N	Naturally present in environment

2023 Water Loss Audit Information	
Time Period Covered by Audit	Estimated Gallons of Water Lost During 2023
January to December 2023	3,100,000
Comments and/or Explanations Most of the water lost during 2023 was the result of flushing to maintain water quality or leaks in the distribution system.	

2023 Regulated Contaminants Detected

Lead and Copper

Action 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)	90 th Percentile	#Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2023	1.3	1.3	0.349	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing system
Lead	2023	0	15	9.43	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Regulated Contaminants in the City of Baird Distribution System

Disinfectants and By-Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2023	37	4.2-22.3	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2023	101	35.9-171	No goal for the total	80	ppb	Y	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
Arsenic	2023	1	1.1-1.1	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium	2023	0.16	0.16 - 0.16	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Cyanide	2023	98.2	98.2-98.2	200	200	ppm	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.
Fluoride	2023	0.5	0.514-0.514	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	0.367	0.367-0.367	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Nitrite [measured as Nitrogen]	10/06/2022	0.231	0.231-0.231	1	1	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
Betaiphoton emitters	06/07/2018	9.2	9.2-9.2	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.

Turbidity

	Limit (Treatment Technique)	Level Detected	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

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 in the City of Abilene

Disinfectants and By-Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorite	2023	0.693	0-0.693	0.8	1	ppm	N	By-product of drinking water disinfection.
Halacetic Acids (HAA5)	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	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Cyanide	2023	147	65.7-147	200	200	ppm	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.
Nitrate [measured as Nitrogen]	2023	0.29	0.237-0.29	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/alpha emitters	2023	10.7	7.7-10.7	0	50	pCi/L*	N	Decay of natural and man-made deposits.
Uranium	2023	2.9	0- 2.9	0	30	Ug/l	N	Erosion of natural deposits.

Violations- City of Baird

Lead and Copper Rule- 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.

Public Notification Rule

Public Notification Rule- The Public Notification Rule helps to ensure that consumers will always know if there is a problem with their drinking water. These notices immediately alert consumers if there is a serious problem with their drinking water (e.g., a boil water emergency).

Violation Type	Violation Begin	Violation End	Violation Explanation
PUBLIC NOTICE RULE LINKED TO VIOLATION	12/21/2023	2023	We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations.

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
LEVEL 1 ASSESS, MULTIPLE TC POS (RTCR)	12/22/2023	2023	We failed to properly complete a Level 1 Assessment in our water system.
Total Trihalomethanes (TTHM)			
Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer			
Violation Type	Violation Begin	Violation End	Violation Explanation
FAILURE SUBMIT OEL REPORT FOR TTHM	11/21/2022	01/31/2024	We failed to submit our operational evaluation level (OEL) report to our regulator. The report is needed to determine best treatment practices necessary to minimize possible future exceedences of TTHM.
FAILURE SUBMIT OEL REPORT FOR TTHM	06/10/2023	01/31/2024	We failed to submit our operational evaluation level (OEL) report to our regulator. The report is needed to determine best treatment practices necessary to minimize possible future exceedences of TTHM.
FAILURE SUBMIT OEL REPORT FOR TTHM	09/06/2023	01/31/2024	We failed to submit our operational evaluation level (OEL) report to our regulator. The report is needed to determine best treatment practices necessary to minimize possible future exceedences of TTHM.
MCL, LRAA	04/01/2023	06/30/2023	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.

MCL, LRAA	10/01/2023	12/31/2023	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.
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Violations- City of Abilene

Chlorite

Some infants and young children who drink water containing chlorite in excess of the MCL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorite in excess of the MCL. Some people may experience anemia.

Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE (DBP), MAJOR	01/01/2023	01/31/2023	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.