



MAXIMUM RESIDUAL DISINFECTANT LEVEL

Systems must complete and submit disinfection data on the Surface Water Monthly Operations Report (SWMOR). On. the CCR report, the system must provide disinfectant type, minimum, maximum and average levels.

Disinfectant	Year Sampled	Average Level	Range of Levels Detected	MRDL	MRDLG	Unit of Measure	Violation	Potential Source of Contamination
Chloramine	2019	1.47	0.5 – 2.1	2.1	<4.0	ppm	N	Water additive used to control microbes

DISINFECTION BYPRODUCTS

Contaminant	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Unit	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2019	41.7	6.4 - 41.7	No goal	60	ppb	N	Byproduct of drinking water disinfection.
Total Trihalomethanes (TTHMs)	2019	69.6	7.9 - 69.6	No goal	80	ppb	N	Byproduct of drinking water disinfection.

UNREGULATED CONTAMINANTS

Bromoform, chloroform, dichlorobromomethane, and dibromochloromethane are disinfectant byproducts. There is no maximum contaminant level for these chemicals at the entry point to distribution.

Contaminant	Year Sampled	Average Level	Minimum Level	Maximum Level	Unit of Measure	Potential Source of Contamination
Chloroform	2015-2019	19.27	0	50.5	ppb	Byproduct of drinking water disinfection.
Bromoform	2015-2019	0.461	0	3.92	ppb	Byproduct of drinking water disinfection.
Bromodichloromethane	2015-2019	11.00	0.00	55.42	ppb	Byproduct of drinking water disinfection.
Dibromochloromethane	2015-2019	5.88	0.00	30.03	ppb	Byproduct of drinking water disinfection.

UNREGULATED CONTAMINANT MONITORING RULE 2 (UCMR2)

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether further regulation is warranted. Any unregulated contaminants detected are reported in the flowing table. For additional information and data visit <http://www.epa.gov./safewater/ucmr/ucmr2/index.html>, or call the Safe Drinking Water Hotline at (800)426-4791.

Contaminant	Year Sampled	Average Level	Minimum Level	Maximum Level	Unit of Measure	Potential Source of Contamination
Chloroform	2019	17.97	0	50.5	ppb	Byproduct of drinking water disinfection.
Bromoform	2019	0.11	0	1.23	ppb	Byproduct of drinking water disinfection.
Bromodichloromethane	2019	12.3	0	34.4	ppb	Byproduct of drinking water disinfection.
Dibromochloromethane	2019	6.11	0	27.4	ppb	Byproduct of drinking water disinfection.

LEAD AND COPPER

Contaminant	Date Sampled	MCLG	Action Level	90th Percentile	# Sites Over AL	Units	Violation	Potential Source of Contamination
Copper	07/18/2017	1.3	1.3	0.212	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	07/18/2017	0	15	3.07	0	ppb	N	Corrosion of household plumbingsystems;Erosion of natural deposits.

**Additional Health Information for Lead** “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 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>.”

ASBESTOS

Some people who drink water containing asbestos well in excess of the maximum contaminant level (MCL) for many years may have an increased risk of developing benign intestinal polyps.

Year Sampled	Average Level	Minimum Level	Maximum Level	MCL Limit	Unit of Measure	Potential Source of Contamination
2013	<0.185	<0.185	<0.185	7	MFL	Decay of asbestos cement water mains; and erosion of natural deposits.

TURBIDITY

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.

Contaminant	Year Sampled	Highest Single Measurement	Lowest monthly % of Samples Meeting Limits	Turbidity Limit	Unit of Measure	Potential Source of Contamination
Turbidity	2019	0.29	100%	0.3	NTU	Soil Runoff

TOTAL ORGANIC CARBON

The City of Henderson met and/or exceeded all TOC removal requirements for 2018.

TOTAL COLIFORM

Total coliform bacteria are used as indicators of microbial contamination of drinking water because testing for them is easy. While not disease-causing organisms, they are often found in association with other microbes that are capable of causing disease. Coliform bacteria are more hardy than many disease-causing organisms; therefore, their absence from water is a good indication that the water is microbiologically safe for human consumption.

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest Number of Positive Samples	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	2 positive monthly samples	2	1	0	N	Naturally present in the environment

**\*Explanation Statement: 1 sample & 1 downstream sample were positive for total coliform. Level 1 assessment found sanitary defects at sample sites.**

SECONDARY AND OTHER CONSTITUENTS NOT REGULATED

(NO ASSOCIATED ADVERSE HEALTH EFFECTS)

Constituent	Year Sampled	Number of Samples	Average Level	Minimum Level	Maximum Level	Secondary Limit	Unit of Measure	Potential Source of Contamination
Aluminum	2019	1	0.054	0.054	0.054	0.2	ppm	Abundant naturally occurring element.
Alkalinity, Bicarbonate	2019	1	32.1	32.1	32.1	N/A	ppm	Corrosion of carbonate rocks such as limestone.
Calcium	2019	1	10.6	10.6	10.6	N/A	ppm	Abundant naturally occurring element.
Chloride	2019	1	34	34	34	N/A	ppm	Abundant naturally occurring element; used in water purification; byproduct of oil field activity.
Copper	2017	38	0.089	0.00022	0.575	1.3	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Iron	2019	1	<0.05	<0.05	<0.05	0.3	ppm	Erosion of natural deposits; iron or steel water delivery equipment or facilities
Lead	2017	38	1.816	0.546	5.47	N/A	ppm	Corrosion of household plumbing systems; erosion of natural deposits.
Magnesium	2019	1	3.53	3.53	3.53	N/A	ppm	Abundant naturally occurring element.
Manganese	2019	1	0.0016	0.0016	0.0016	0.05	ppm	Abundant naturally occurring element.
pH	2019	356	8.1	7.7	8.9	N/A	units	Measure of corrosivity of water.
Sodium	2019	1	27.4	27.4	27.4	N/A	ppm	Erosion of natural deposits; byproduct of oil Field activity.
Sulfate	2019	1	28.1	28.1	28.1	300	ppm	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
Total Alkalinity as CaCO3	2019	12	30.5	7	50	N/A	ppm	Naturally occurring soluble mineral salts.
Total Dissolved Solids	2019	1	132	132	132	1000	ppm	Total dissolved mineral constituents in water.
Total Hardness as Magnesium	2016	1	53	53	53	N/A	ppm	Naturally occurring calcium.
Zinc	2019	1	0	0	0	5	ppm	Moderately abundant naturally occurring elements used in the metal industry.

Definitions and Abbreviations

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

**ALG (Action Level Goal):** 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.

**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.

**MCLG (Maximum Contaminant Level Goal):** 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.

**MRDL (Maximum residual disinfectant level):** 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.

**MRDLG (Maximum residual disinfectant level goal):** 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 - 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.

**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.