

City of Romulus

LeRoy D. Burcroff

Mayor

ADMINISTRATIVE and LEGISLATIVE OFFICES
11111 Wayne Road • Romulus, Michigan 48174-1485
Telephone (734) 942-7571 • FAX (734) 941-2122

ELLEN L. CRAIG-BRAGG

Clerk

(734) 942-7540 FAX (734) 942-7592

STACY A. PAIGE

Treasurer

(734) 942-7580 FAX (734) 941-5541

June 2018

Dear Resident:

Please find enclosed the 2017 Water Quality Report for the City of Romulus which was developed to provide you with important information about the quality of our drinking water. This report meets all Federal and State regulations under the Safe Drinking Water Act requiring water utilities to provide detailed information to their customers.

Please take a moment to read this brochure. I am pleased to inform you that our water service meets and/or exceeds all Federal and State standards for water quality and safety.

In order to ensure that our tap water is safe to drink, the Environmental Protection Agency of the U.S. government prescribes regulations that limit the amount of contaminants in water provided by public health systems. The Detroit Water and Sewerage Department treats your water in accordance with EPA and State of Michigan regulations. The Food and Drug Administration also regulates limits for contaminants in bottled water to protect the public health.

Let me assure you that the City of Romulus is working hard to make sure that you receive the highest quality of water service. If you have any questions regarding the information presented herein, you may contact the Department of Public Works at (734) 942-7579, or as always, feel free to contact my office at (734) 942-7571.

Sincerely,



Mayor LeRoy D. Burcroff
City of Romulus

LINDA R. CHOATE
Councilwoman

JOHN BARDEN
Mayor Pro Tem

WILLIAM WADSWORTH
Councilman

CELESTE ROSCOE
Councilwoman

HARRY CROUT
Councilman

KATHY ABDO
Councilwoman

SYLVIA J. MAKOWSKI
Councilwoman

2017 Water Quality Report for the City of Romulus

The City of Romulus Department of Public Works wants you to know that your tap water is safe to drink and that it meets or surpasses all Federal and State standards for quality and safety. The Romulus D.P.W. is proud of the fine drinking water it supplies and we are honored to bring this report to you. Last year as in years past, your tap water met all U.S. and Environmental Protection Agency (EPA) and State drinking water health standards. This 2017 Water Quality Report shows the source of our water, lists the results of our tests, and contains important information regarding water and health. We are pleased to show you how we have surpassed water quality standards as mandated by the EPA and the State of Michigan DEQ. To ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

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 Environmental Protection Agency's Safe Drinking Water Hotline at (800-426-4791).

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 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 organics, 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. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Microbial contaminants such as: viruses and bacteria that 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 stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming, pesticides and herbicides that may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses. Organic chemical contaminants including synthetic and volatile organics that are by-products of industrial processes and petroleum production and can also come from gas stations, urban storm water runoff and septic systems, and radioactive contaminants that can be naturally occurring or be the result of oil and gas production and mining activities. In order to ensure that top water is safe to drink, EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. The Food & Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than is the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants 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. The City of Romulus 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>.

Your source water comes from the Detroit River, situated within the Lake St. Clair, and several watersheds within U.S. and Canada. The Michigan Department of Environmental Quality in partnership the Detroit Water and Sewerage Department and several other governmental agencies performed a source water assessment in 2004 to determine the susceptibility or relative potential of contamination. The susceptibility rating is on a seven-tiered scale from "very low" to "very high" based primarily on geologic sensitivity, water chemistry, and contamination sources. The susceptibility of our Detroit River source water intakes were determined to be highly susceptible to potential contamination. However, all four Detroit water treatment plants that use source water from Detroit River have historically provided satisfactory treatment of this source water to meet drinking water standards.

GLWA initiated source-water protection activities that include chemical containment, spill response, and a mercury reduction program. GLWA participates in a National Pollutant Discharge Elimination System permit discharge program and has an emergency response management plan. GLWA voluntarily developed and

receive approval in 2017 for a source water protection program (SWIPP) for the Detroit River intakes. The program includes seven elements that include the following: roles and duties of government units and water supply agencies, delineation of a source water protection area, identification of potential source water protection areas, management approaches for protection, contingency plans, siting of new sources and public participation and education. If you would like to know more information about the Source Water Assessment or SWIPP, contact your water department (734) 942-7579.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested (at your expense) and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800) 426-4791).

Unregulated contaminants are those for which the EPA has not established drinking water standards. Monitoring helps the EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants. Beginning in July of 2008, the Detroit Water and Sewerage Department (DWSD) began monitoring quarterly for unregulated contaminants under the Unregulated Contaminant Monitoring Rule 2 (UCMR2). All the UCMR2 contaminants monitored on List 1 and List 2 in 2008 were undetected. In addition, UCMR3 testing was completed in 2014, results from those samples were also non-detectable.

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes Cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in our source water. Cryptosporidium was detected twice, during a twelve-month period at our Detroit River intake plants. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of Cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immune-compromised people, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage immune-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

If you would like to know more about this report, please visit the Great Lakes Water Authority's website at www.GLWATER.org.

Southwest Water Treatment Plant 2017 Regulated Detected Contaminants Tables

2017 Inorganic Chemicals – Monitoring at the Plant Finished Water Tap								
Regulated Contaminant	Test Date	Unit	Health Goal MCLG	Allowed Level MCL	Highest Level Detected	Range of Detection	Violation yes/no	Major Sources in Drinking Water
Fluoride	5-16-2017	ppm	4	4	0.61	n/a	no	Erosion of natural deposits; Water additive, which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate	5-16-2017	ppm	10	10	0.95	n/a	no	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Barium	5-16-2017	ppm	2	2	0.01	n/a	no	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits

2017 Disinfection By-Products – Monitoring in Distribution System, Stage 2 Disinfection By-Products								
Regulated Contaminant	Test Date	Unit	Health Goal MCLG	Allowed Level MCL	Highest LRAA	Range of Detection	Violation yes/no	Major Sources in Drinking Water
Total Trihalomethanes (TTHM)	2017	ppb	n/a	80	46	25-46	No	By-product of drinking water chlorination
Haloacetic Acids (HAA5)	2017	ppb	n/a	60	30	12-30	No	By-product of drinking water disinfection

2017 Disinfectant Residuals – Monitoring in Distribution System by Treatment Plant								
Regulated Contaminant	Test Date	Unit	Health Goal MRDLG	Allowed Level MRDL	Highest RAA	Quarterly Range of Detection	Violation yes/no	Major Sources in Drinking Water
Total Chlorine Residual	Jan-Dec 2017	ppm	4	4	0.65	0.51-0.72	no	Water additive used to control microbes

2017 Turbidity – Monitored every 4 hours at Plant Finished Water				
Highest Single Measurement Cannot exceed 1 NTU	Lowest Monthly % of Samples Meeting Turbidity Limit of 0.3 NTU (minimum 95%)		Violation yes/no	Major Sources in Drinking Water
0.22 NTU	100 %		no	Soil Runoff
Turbidity is a measure of the cloudiness of water. We monitor it because it is a good indicator of the effectiveness of our filtration system.				

2017 Lead and Copper Monitoring at Customers' Tap								
Regulated Contaminant	Test Date	Unit	Health Goal MCLG	Action Level AL	90 th Percentile Value*	Number of Samples over AL	Violation yes/no	Major Sources in Drinking Water
Lead	2017	ppb	0	15	41.6	2	no	Corrosion of household plumbing system; Erosion of natural deposits.
Copper	2017	ppm	1.3	1.3	.286	0	no	Corrosion of household plumbing system; Erosion of natural deposits; Leaching from wood preservatives.

*The 90th percentile value means 90 percent of the homes tested have lead and copper levels below the given 90th percentile value. If the 90th percentile value is above the AL additional requirements must be met.

Regulated Contaminant	Treatment Technique 2017	Typical Source of Contaminant
Total Organic Carbon (ppm)	The Total Organic Carbon (TOC) removal ratio is calculated as the ratio between the actual TOC removal and the TOC removal requirements. The TOC was measured each quarter and because the level was low, there is no TOC removal requirement	Erosion of natural deposits

**Southwest Water Treatment Plant
2017 Regulated Detected Contaminants Tables**

Radionuclides 2014

Regulated contaminant	Test date	Unit	Health Goal MCLG	Allowed Level	Level detected	Violation Yes/no	Major Sources in Drinking water
Combined Radium 226 and 228	5-13-14	pCi/L	0	5	0.65 + or - 0.54	no	Erosion of natural deposits

Contaminant	MCLG	MCL	Level Detected 2017	Source of Contamination
Sodium (ppm)	n/a	n/a	5.90	Erosion of natural deposits

Springwells Water Treatment Plant 2017 Regulated Detected Contaminants Tables

2017 Inorganic Chemicals – Monitoring at the Plant Finished Water Tap

Regulated Contaminant	Test Date	Unit	Health Goal MCLG	Allowed Level MCL	Highest Level Detected	Range of Detection	Violation yes/no	Major Sources in Drinking Water
Fluoride	5-16-2017	ppm	4	4	0.63	n/a	no	Erosion of natural deposits; Water additive, which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate	5-16-2017	ppm	10	10	0.38	n/a	no	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Barium	5-16-2017	ppm	2	2	0.01	n/a	no	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits

2017 Disinfection By-Products – Monitoring in Distribution System, Stage 2 Disinfection By-Products

Regulated Contaminant	Test Date	Unit	Health Goal MCLG	Allowed Level MCL	Highest LRAA	Range of Detection	Violation yes/no	Major Sources in Drinking Water
Total Trihalomethanes (TTHM)	2017	ppb	n/a	80	46	25-46	NO	By-product of drinking water chlorination
Haloacetic Acids (HAA5)	2017	ppb	n/a	60	30	12-30	NO	By-product of drinking water disinfection

2017 Disinfectant Residuals – Monitoring in Distribution System by Treatment Plant

Regulated Contaminant	Test Date	Unit	Health Goal MRDLG	Allowed Level MRDL	Highest RAA	Quarterly Range of Detection	Violation yes/no	Major Sources in Drinking Water
Total Chlorine Residual	Jan-Dec 2017	ppm	4	4	0.71	0.65-0.74	no	Water additive used to control microbes

2017 Turbidity – Monitored every 4 hours at Plant Finished Water

Highest Single Measurement Cannot exceed 1 NTU	Lowest Monthly % of Samples Meeting Turbidity Limit of 0.3 NTU (minimum 95%)	Violation yes/no	Major Sources in Drinking Water
0.24 NTU	100%	no	Soil Runoff

Turbidity is a measure of the cloudiness of water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

2017 Lead and Copper Monitoring at Customers' Tap

Regulated Contaminant	Test Date	Unit	Health Goal MCLG	Action Level AL	90 th Percentile Value*	Number of Samples over AL	Violation yes/no	Major Sources in Drinking Water
Lead	2017	ppb	0	15	41.6	2	no	Corrosion of household plumbing system; Erosion of natural deposits.
Copper	2017	ppm	1.3	1.3	.286	0	no	Corrosion of household plumbing system; Erosion of natural deposits; Leaching from wood preservatives.

*The 90th percentile value means 90 percent of the homes tested have lead and copper levels below the given 90th percentile value. If the 90th percentile value is above the AL additional requirements must be met.

Regulated Contaminant	Treatment Technique 2017	Typical Source of Contaminant
Total Organic Carbon (ppm)	The Total Organic Carbon (TOC) removal ratio is calculated as the ratio between the actual TOC removal and the TOC removal requirements. The TOC was measured each quarter and because the level was low, there is no TOC removal requirement	Erosion of natural deposits

**Springwells Water Treatment Plant
2017 Regulated Detected Contaminants Tables**

Contaminant	MCLG	MCL	Level Detected 2017	Source of Contamination
Sodium (ppm)	n/a	n/a	4.96	Erosion of natural deposits

Great Lakes Water Authority voluntarily monitors for the protozoans Cryptosporidium and Giardia. The December 2017 untreated water sample collected at the Belle Isle intake contained 1 Giardia cyst. All other samples collected in the year 2017 were absent for the presence of Cryptosporidium and Giardia in the untreated water. Systems using surface water Like GLWA must provide treatment so that 99.9 percent of *Giardia lamblia* is removed or inactivated.



**Great Lakes Water Authority
Water Quality**

DISTRIBUTION & BRACKETING - (01/01/2017 to 12/31/2017)

Town: ROMULUS

Date	Pt.	Br	Cl2	Sample Number	Total Coliform	E. Coli	HPC	Turbidity	Flouride	pH
01/04/2017	1		0.47	29	-	-				
01/13/2017	1		0.73	21	-	-		8.17	0.41	
01/16/2017	1		0.87	1	-	-		0.17		
01/17/2017	1		0.89	42	-	-		0.31	0.40	7.03
01/20/2017	1		0.94	23	-	-		0.33	0.58	6.40
01/26/2017	1		0.93	8	-	-				
02/05/2017	1		0.58	66	-	-				
02/08/2017	1		0.37	41	-	-		0.37	0.40	
02/13/2017	1		0.65	28	-	-				
02/24/2017	1		0.51	6	-	-				
03/07/2017	1		0.74	8	-	-				
03/16/2017	1		0.79	46	-	-				
03/28/2017	1		0.75	32	-	-				
04/06/2017	1		0.73	56	-	-		0.44	0.50	
04/12/2017	1		0.35	8	-	-				
04/26/2017	1		0.56	61	-	-				
05/02/2017	1		0.59	21	-	-		0.44	0.61	



**Great Lakes Water Authority
Water Quality**

DISTRIBUTION & BRACKETING - (01/01/2017 to 12/31/2017)

Town: **ROMULUS**

Date	Pt.	Br	Cl2	Sample Number	Total Coliform	E. Coli	HPC	Turbidity	Flouride	pH
05/09/2017	1		0.63	20	-	-				
05/22/2017	1		0.44	54	-	-				
06/05/2017	1		0.52	20	-	-		1.53	0.65	
06/07/2017	1			314						6.24
06/14/2017	1		0.32	7	-	-				
06/21/2017	1		0.92	8	-	-				
06/26/2017	1		0.45	49	-	-				
07/10/2017	1		0.57	18	-	-		4.36	0.64	
07/12/2017	1		0.40	50	-	-				
07/19/2017	1		0.20	6	-	-				
07/26/2017	1		0.46	19	-	-				
08/03/2017	1		0.25	51	-	-		0.34	0.51	
08/09/2017	1		0.67	35	-	-				
08/16/2017	1		0.50	24	-	-				
08/22/2017	1		0.31	19	-	-				
09/06/2017	1		0.40	36	-	-		0.32	0.61	
09/13/2017	1		0.25	31	-	-				



**Great Lakes Water Authority
Water Quality**

DISTRIBUTION & BRACKETING - (01/01/2017 to 12/31/2017)

Town: ROMULUS

Date	Pt.	Br	Cl2	Sample Number	Total Coliform	E. Coli	HPC	Turbidity	Flouride	pH
09/19/2017	1		0.19	20	-	-				
09/28/2017	1		0.30	20	-	-				
10/02/2017	1		0.27	29	-	-		1.12	0.65	
10/12/2017	1		0.66	39	-	-				
10/16/2017	1		0.64	64	-	-				
10/27/2017	1		0.70	11	-	-				
11/02/2017	1		0.53	8	-	-				
11/07/2017	1		0.46	25	-	-				
11/15/2017	1		0.65	55	-	-				
11/17/2017	1		0.67	8	-	-				
12/04/2017	1		0.56	52	-	-				
12/08/2017	1		0.30	47	-	-				
12/13/2017	1		0.73	62	-	-				
12/18/2017	1		0.32	34	-	-				
01/13/2017	9		0.59	22	-	-				
01/16/2017	9		0.75	2	-	-				
01/18/2017	9		0.69	43	-	-				



**Great Lakes Water Authority
Water Quality**

DISTRIBUTION & BRACKETING - (01/01/2017 to 12/31/2017)

Town: ROMULUS

Date	Pt.	Br	Cl2	Sample Number	Total Coliform	E. Coli	HPC	Turbidity	Flouride	pH
02/13/2017	9		0.62	29	-	-				
02/20/2017	9		0.90	34	-	-				
03/07/2017	9		0.76	9	-	-				
03/21/2017	9		0.51	21	-	-				
04/12/2017	9		0.55	9	-	-				
04/20/2017	9		0.60	20	-	-				
05/09/2017	9		0.70	21	-	-				
05/18/2017	9		0.41	8	-	-				
06/14/2017	9		0.54	8	-	-				
07/12/2017	9		0.40	51	-	-				
08/09/2017	9		0.40	36	-	-				
09/13/2017	9		0.50	32	-	-				
10/12/2017	9		0.73	40	-	-		0.24	0.67	
11/07/2017	9		0.67	26	-	-				
12/08/2017	9		0.66	48	-	-				
01/04/2017	12		0.67	30	-	-		0.21	0.47	
02/05/2017	12		0.83	67	-	-		0.30	0.75	



**Great Lakes Water Authority
Water Quality**

DISTRIBUTION & BRACKETING - (01/01/2017 to 12/31/2017)

Town: **ROMULUS**

Date	Pt.	Br	Cl2	Sample Number	Total Coliform	E. Coli	HPC	Turbidity	Flouride	pH
02/08/2017	12		0.60	42	-	-				
02/24/2017	12		0.66	11	-	-				
03/16/2017	12		0.47	47	-	-		0.23	0.49	
03/21/2017	12		0.65	22	-	-				
04/06/2017	12		0.72	57	-	-				
04/20/2017	12		0.98	21	-	-				
05/02/2017	12		0.79	22	-	-				
05/18/2017	12		0.59	9	-	-				
06/05/2017	12		0.54	21	-	-				
06/26/2017	12		0.93	50	-	-		0.41	0.62	
07/10/2017	12		0.22	19	-	-				
07/26/2017	12		0.69	20	-	-				
08/03/2017	12		0.63	52	-	-				
08/22/2017	12		0.64	20	-	-				
09/06/2017	12		0.68	37	-	-				
09/28/2017	12		0.60	21	-	-				
10/02/2017	12		0.73	30	-	-				



**Great Lakes Water Authority
Water Quality**

DISTRIBUTION & BRACKETING - (01/01/2017 to 12/31/2017)

Town: ROMULUS

Date	Pt.	Br	Cl2	Sample Number	Total Coliform	E. Coli	HPC	Turbidity	Flouride	pH
10/27/2017	12		0.80	12	-	-				
11/02/2017	12		0.82	9	-	-		0.17	0.73	
11/17/2017	12		0.88	9	-	-				
12/04/2017	12		0.92	53	-	-		0.43	0.68	
12/18/2017	12		0.70	35	-	-				
01/26/2017	13		0.95	9	-	-				
02/20/2017	13		1.07	36	-	-				
03/28/2017	13		0.87	33	-	-				
04/26/2017	13		0.71	62	-	-				
05/22/2017	13		0.53	55	-	-				
06/21/2017	13		0.81	9	-	-		3.22		
07/19/2017	13		0.64	7	-	-				
08/16/2017	13		0.60	25	-	-				
09/19/2017	13		0.60	21	-	-				
10/16/2017	13		0.84	65	-	-				
11/15/2017	13		0.75	56	-	-				
12/13/2017	13		0.76	63	-	-				



Great Lakes Water Authority
Water Quality

DISTRIBUTION & BRACKETING - (01/01/2017 to 12/31/2017)

Town: ROMULUS

Date	Pt.	Br	Cl2	Sample Number	Total Coliform	E. Coli	HPC	Turbidity	Flouride	pH
Total:	102	0	101	102	101	101	0	20	18	3

Key to the Detected Contaminants Table

Symbol	Abbreviation	Definition/Explanation
>	Greater than	
°C	Celsius	A scale of temperature in which water freezes at 0° and boils at 100° under standard conditions.
AL	Action Level	The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements which a water system must follow.
HAA5	Haloacetic Acids	HAA5 is the total of bromoacetic, chloroacetic, dibromoacetic, dichloroacetic, and trichloroacetic acids. Compliance is based on the total.
LRAA	Locational Running Annual Average	The average of analytical results for samples at a particular monitoring location during the previous four quarters.
MCL	Maximum Contaminant Level	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 contaminant in drinking water below which there is no known or expected risk to health.
MRDL	Maximum Residual Disinfectant Level	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.
MRDLG	Maximum Residual Disinfectant Level Goal	The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.
n/a	not applicable	
ND	Not Detected	
NTU	Nephelometric Turbidity Units	Measures the cloudiness of water.
pCi/L	Picocuries Per Liter	A measure of radioactivity
ppb	Parts Per Billion (one in one billion)	The ppb is equivalent to micrograms per liter. A microgram = 1/1000 milligram.
ppm	Parts Per Million (one in one million)	The ppm is equivalent to milligrams per liter. A milligram = 1/1000 gram.
RAA	Running Annual Average	The average of analytical results for all samples during the previous four quarters.
TT	Treatment Technique	A required process intended to reduce the level of a contaminant in drinking water.
TTHM	Total Trihalomethanes	Total Trihalomethanes is the sum of chloroform, bromodichloromethane, dibromochloromethane and bromoform. Compliance is based on the total.
µmhos	Micromhos	Measure of electrical conductance of water