2020 WATER QUALITY REPORT FOR RATHBUN REGIONAL WATER ASSN (RATHBUN)

This report contains important information regarding the water quality in our water system. The source of our water is surface water. Our water quality testing shows the following results:

CONTAMINANT	MCL - (MCLG)	Compliance		Date	Violation	Source
		Type	Value & (Range)		Yes/No	
Total Trihalomethanes (ppb) [TTHM] DB01	80 (N/A)	LRAA	46 (39 - 46)	4th Quarter 2020	No	By-products of drinking water chlorination
Total Trihalomethanes (ppb) [TTHM] DB02	80 (N/A)	LRAA	47 (38 – 49)	4th Quarter 2020	No	By-products of drinking water chlorination
Total Trihalomethanes (ppb) [TTHM] DB03	80 (N/A)	LRAA	44 (33 – 48)	3rd Quarter 2020	No	By-products of drinking water chlorination
Total Trihalomethanes (ppb) [TTHM] DB04	80 (N/A)	LRAA	47 (41 – 50)	4th Quarter 2020	No	By-products of drinking water chlorination
Total Haloacetic Acids (ppb) [HAA5] DB01	60 (N/A)	LRAA	24 (10 - 25)	2nd Quarter 2020	No	By-products of drinking water disinfection
Total Haloacetic Acids (ppb) [HAA5] DB02	60 (N/A)	LRAA	25 (16 – 24)	2nd Quarter 2020	No	By-products of drinking water chlorination
Total Haloacetic Acids (ppb) [HAA5] DB03	60 (N/A)	LRAA	23 (16 – 24)	2nd Quarter 2020	No	By-products of drinking water chlorination
Total Haloacetic Acids (ppb) [HAA5] DB04	60 (N/A)	LRAA	27 (18 – 26)	1st Quarter 2020	No	By-products of drinking water chlorination
Lead (ppb)	AL=15 (0)	90th	1.00 (ND - 3)	2020	No	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm)	AL=1.3 (1.3)	90th	0.25 (0.05 - 0.49)	2020	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
950 - DISTRIBUTION SYSTEM						
Chlorine (ppm)	MRDL=4.0 (MRDLG=4.0)	RAA	3.01 (2.66 - 3.24)	09/2020	No	Water additive used to control microbes
Fluoride	4 (4)	SGL	0.83 (0.62 – 0.83)	10/2020	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
01 - EAST PLANT @ AFTER TREATMENT						
Sodium (ppm)	N/A (N/A)	SGL	26	01/08/2020	No	Erosion of natural deposits; Added to water during treatment process
Nitrate [as N] (ppm)	10 (10)	SGL	1	7/14/2020	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Atrazine (ppb)	3 (3)	SGL	0.20	04/07/2020	No	Runoff from herbicide used on row crops
Metolachlor (ppm)	N/A (N/A)	SGL	0.0005	04/07/2020	No	Runoff from herbicide used on row crops
Turbidity (NTU)	N/A (N/A)	TT	0.060 (100%)	01/2020	No	Soil runoff
Total Organic Carbon	30%	TT	(33.9 – 56.8)	11/2020	No	Naturally Present in the Environment

03 - WEST PLANT @ AFTER TREATMENT						
Sodium (ppm)	N/A (N/A)	SGL	26	01/08/2020	No	Erosion of natural deposits; Added to water during treatment process
Nitrate [as N] (ppm)	10 (10)	SGL	1	7/14/2020	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Atrazine (ppb)	3 (3)	SGL	0.50	03/15/2017	No	Runoff from herbicide used on row crops
Turbidity (NTU)	N/A (N/A)	TT	0.068 (100%)	08/2020	No	Soil runoff
Total Organic Carbon	30%	TT	(40.3 – 63.0)	11/2020	No	Naturally Present in the Environment

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Dichloracetic Acid	N/A (N/A)	ppb	14 (9 – 14)	2018	No	Unregulated Contaminants Monitoring Rule, 4th Edition
Trichloroacetic Acid	N/A (N/A)	ppb	9.6 (3.3 – 9.6)	2018	No	Unregulated Contaminants Monitoring Rule, 4th Edition
Bromochloroacetic Acid	N/A (N/A)	ppb	3.6 (2.0 – 3.6)	2018	No	Unregulated Contaminants Monitoring Rule, 4th Edition
Dibromoacetic Acid	N/A (N/A)	ppb	0.77 (<0.30 - 0.77)	2018	No	Unregulated Contaminants Monitoring Rule, 4th Edition
Bromodichloroacetic Acid	N/A (N/A)	ppb	2.6 (1.7 – 2.6)	2018	No	Unregulated Contaminants Monitoring Rule, 4th Edition
Chlorodibromoacetic Acid	N/A (N/A)	ppb	0.72 (0.44 – 0.72)	2018	No	Unregulated Contaminants Monitoring Rule, 4th Edition
Manganese	N/A (N/A)	ppb	20 (3 – 20)	2018	No	Unregulated Contaminants Monitoring Rule, 4th Edition

Note: Contaminants with dates indicate results from the most recent testing done in accordance with regulations.

DEFINITIONS

- Maximum Contaminant Level (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 (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.
- ppb -- parts per billion.
- ppm -- parts per million.
- pCi/L – picocuries per liter
- N/A – Not applicable
- ND -- Not detected
- RAA – Running Annual Average
- 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.
- 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.
- Maximum Residual Disinfectant Level (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.
- SGL – Single Sample Result
- RTCR – Revised Total Coliform Rule
- NTU – Nephelometric Turbidity Units

GENERAL INFORMATION

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 posed a health risk. More information about contaminants or potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than 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. RATHBUN REGIONAL WATER ASSN (RATHBUN) 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.

SOURCE WATER ASSESSMENT INFORMATION

This water supply obtains water from one or more surface waters. Surface water sources are susceptible to sources of contamination within the drainage basin.

Surface Water Name	Susceptibility
Chariton River	high
Rathbun Lake	high

OTHER INFORMATION

Turbidity is an indicator of treatment filter performance and is regulated as a treatment technique.

CONTACT INFORMATION

For questions regarding this information or how you can get involved in decisions regarding the water system, please contact RATHBUN REGIONAL WATER ASSN (RATHBUN) at 641-647-2416.