

# 2012 WATER QUALITY REPORT

## FOR

### Rathbun Regional Water Association, Inc.

### Burlington System

### PWSID# 0400902

This report contains important information regarding the water quality in our water system. The water source for Rathbun Regional Water Association, Inc, Burlington System is the City of Burlington. RRWA obtains its water from the City of Burlington Municipal Waterworks. The City of Burlington has two (2) sources of water it uses to supply the needs of our customers. Approximately eighty percent (80%) comes from the Mississippi River and twenty percent (20%) comes from 3 wells in the Pleistocene aquifer, an underground source.

Our water quality testing shows the following results:

CONTAMINANT	MCL - (MCLG)	Compliance Type	Valve & (Range)	Date	Violation	SOURCE
2909053 – Burlington Municipal Waterworks						
01 – S/EP FM Mississippi River & Wells 1, 2 &3						
Sodium (ppm)	N/A (N/A)	SGL	14.6	05/09/2012	No	Erosion of natural deposits; Added to water during treatment process
Nitrate [as N] (ppm)	10 (10)	SGL	3.1 (0.20 – 3.10)	12/31/2012	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Toluene	1 (1)	SGL	0.00162	08/13/2012	No	Discharge from petroleum factories
Turbidity (NTU)	N/A	TT	0.08 (100%)	12/31/2012	No	Soil runoff
Fluoride (ppm)	4 (4)	TT	1.36 (0.37 – 1.36)	12/31/2012	No	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Total Organic Carbon (ppm) T OC	N/A	TT	44.89 – 56.29	12/31/2012	No	Naturally present in the environment
950 – Rathbun Distribution System						
Copper (ppm)	AL = 1.3 (1.3)	90 <sup>th</sup>	0.05 (0.01 – 0.08)	09/30/2012	No	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	AL=15 (0)	90 <sup>th</sup>	ND	09/30/2012	No	Corrosion of household plumbing systems; erosion of natural deposits
TTHM (ppb) [Total trihalomethanes]	80 (N/A)	RAA	65 (31 – 97)	06/30/2012	No	By-products of drinking water disinfection
Haloacetic Acids (HAA5) (ppb)	60 (N/A)	RAA	27 (13 – 37)	06/30/2012	No	By-products of drinking water disinfection
Chlorine (ppm)	MRDL=4.0 (MRDLG =4.0)	RAA	2.2 (0.1 – 5.7)	12/31/2012	No	Water additive used to control microbes

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.
- N/A – Not applicable
- N/D -- Not detected at test limit
- 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.
- NTU – Nephelometric Turbidity Units
- 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.
- RAA - Running Annual Average
- IDSE – Initial Distribution System Evaluation
- Cryptosporidium – microbial pathogen found in surface water.
- SGL – Single Sample Result

**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 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 Association, Inc. 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>.

**OTHER INFORMATION**

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 indicated the presence of these organisms in our source water. 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, immuno-compromised people are at greater risk of developing life-threatening illness. We encourage immuno-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.

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

**SOURCE WATER ASSESSMENT INFORMATION**

The water source for Rathbun Regional Water Association, Inc, Burlington System is the City of Burlington. RRWA obtains its water from the City of Burlington Municipal Waterworks. The City of Burlington has two (2) sources of water it uses to supply the needs of our customers. Approximately eighty percent (80%) comes from the Mississippi River and twenty percent (20%) comes from 3 wells in the Pleistocene aquifer, an underground source. The Pleistocene aquifer was determined to be slightly susceptible to contamination because the characteristics of the aquifer and overlying materials limit the rate at which contaminants can move through the aquifer. The City of Burlington wells will be somewhat susceptible to activities such as toxic release inventories, permitted pesticide applicators, manufactured gas plant sites and leaking underground storage tanks. For a summary of the watershed assessment results and additional information contact: Alan Borden at (319) 754-6501.

Original Supply ID	Original Supply Name
IA2909053	Burlington Municipal Waterworks

**CONTACT INFORMATION**

For questions regarding this information or how to get involved in decisions regarding the water system, please contact Rathbun Regional Water Assn. (Burlington) at 641-647-2416 or [rrwainc@rrwa.net](mailto:rrwainc@rrwa.net).