Annual Drinking Water Quality Report for 2014
City of Rehoboth Beach
229 Rehoboth Avenue, Rehoboth Beach, Delaware 19971
PSWID#0000723
May 27, 2015

We're pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water source is **Groundwater. Our wells draw from the Columbia Aquifer.**

The Department of Natural Resources and Environmental Control in conjunction with the Division of Public Health has conducted a source water assessment. If you are interested in reviewing the assessment, please contact the **City of Rehoboth Beach Water Department at 302-227-3194, or go online @** ***http://www.wr.udel.edu/swaphome/swassessments.html***. Overall, Rehoboth Water has a high susceptibility to nutrients, pesticides and other inorganic compounds, a very high susceptibility to pathogens, a moderate susceptibility to petroleum hydrocarbons, PCBs', other organic compounds and metals.

If you have any questions about this report or concerning your water utility, please contact **Howard Blizzard, Water Supervisor at 302-227-3194.** We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on **the third Friday of each month at 7:00 p.m., at City Hall, 229 Rehoboth Avenue.**

Public Health, Office of Drinking Water and City of Rehoboth Beach routinely monitors for constituents in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st to December 31st**, 2014.**

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in $10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Maximum Contaminant Level (MCL) The "Maximum Allowed" (MCL) is 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 "Goal"(MCLG) is 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 (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 (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.

TEST RESULTS						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG/ MRDLG	MCL/ MRDL	Likely Source of Contamination
Disinfectants/Disinfection By-Products						
Chlorine	**N**	0.2-0.7	ppm	4	4	Water additive used to control microbes
Inorganic Contaminants						
Barium	**N**	0.1099 *(2013)	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	**N**	2.3 *(2013)	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Copper (1)site of 20 sites sampled Exceeded the AL for copper	**N**	0.525* **90th Percentile** *(2012)	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	**N**	0.1-1.13	ppm	2	2	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead **(0 sites of 20 sites sampled exceeded the AL for lead)**	**N**	ND **90th Percentile** *(2012)	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as Nitrogen)	**N**	3.2-9.1	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Volatile Organic Contaminants						
Xylenes	**N**	0-0.00124 *(2012)	ppm	10	10	Discharge from petroleum factories; discharge from chemical factories
HAA5 [Haloacetic Acids]	**N**	0.44 *(2010)	ppb	n/a	60	By-product of drinking water disinfection
TTHM [Total trihalomethanes]	**N**	1.274 *(2010)	ppb	n/a	80	By-product of drinking water chlorination
Nickel	**N**	2.3 *(2013)	ppb	n/a	100	Naturally occurring

Unregulated Inorganic Contaminants						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	Average Level detected	MCL/ MRDL	Likely Source of Contamination
Sodium (Na)	**N**	15.9-31 (average 25.6)	ppm		N/A	
Alkalinity (Alk)	**N**	9.9-49.4 (average 36.3)	ppm		N/A	
pH	**N**	6.9-7.4 (average 7.2)	ppm		6.5 – 8.5	
Chloride (Cl)	**N**	11.8-32 (average 24)	ppm		250	
Sulfate	**N**	9.6-17.8 (average 14.2)	ppm		250	
Manganese	**N**	92.5 *(2013)	ppb	n/a	50	

*The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

All other contaminants were ND in compliance with the Safe Drinking Water Act.

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

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. City of Rehoboth Beach 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 (1-800-426-4791 or at www.epa.gov/safewater/lead.

As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water **IS SAFE** at these levels.

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 pickup substances resulting from the presence of animals or from human activity.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. All 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 the 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 1-800-426-4791.

MCL's are set at very stringent levels. The MCL's are set such that out of every 10,000 or 1,000,000 people (depends upon how the MCL was developed) drinking 2 liters of water every day for a lifetime, only 1 of those people may experience the described health effect.

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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Please call our office if you have questions.

We at City of Rehoboth Beach work around the clock to provide top quality water to every tap, said Howard Blizzard. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.