Annual Drinking Water Quality Report for 2012
Town of Greenwood
P.O. Box 216
Greenwood, DE 19950
PWS #DE0000558
June 11, 2013

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 and Federalsburg Aquifers.**

The Division of Public Health in conjunction with the Department of Natural Resources and Environmental Control has conducted a source water assessment. If you are interested in reviewing the assessment, please contact **Town Hall @ 302-349-4534** regarding how to obtain a copy. Or go on-line @ **http:/www.wr.udel.edu/swaphome/swassessments.html.** The contaminant potential from all discrete sources is as follows: Low Contaminant Potential for Nutrients, Negligible Contaminant Potential for Pathogens, High Contaminant Potential for Petroleum, Negligible Contaminant Potential for Pesticides, Negligible Contaminant Potential for PCBs, High Contaminant Potential for Other Organic, Negligible Contaminant Potential for Metals, Negligible Contaminant Potential for Other Inorganic.

I'm pleased to report that our drinking water meets federal and state requirements.

If you have any questions about this report or concerning your water utility, please contact **Roger Breeding @ 302.349.4534.** 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 **first Tuesday of each month at 7:30pm at the Town Hall, 100 West Market Street.**

Public Health, Office of Drinking Water and the Town of Greenwood routinely monitor 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, **2012.**

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. Or 1 drop in 13 gallons.

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. Or 1 drop in 13,000 gallons.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

Action Level (AL) - 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 or MRDLG	MCL or MRDL	Likely Source of Contamination
Chlorine Residual						
Chlorine (Cl2)	N	0.32-0.91	ppm	4	4	Water additive used to control microbes
Radioactive Contaminants						
5. Alpha emitters	N	1.8-4.7 *(2011)	pCi/l	0	15	Erosion of natural deposits
6. Combined radium	N	0-1.609	pCi/l	0	5	Erosion of natural deposits
Inorganic Contaminants						
11. Barium	N	0-0.2566 *(2011)	ppm	2	2	Discharge of drilling waste:discharge from metal refineries:erosion of natural deposits
12. Beryllium	N	0-0.6 *(2011)	ppb	4	4	Discharge from metal refineries and coal burning factories:discharge from electrical, aerospace, and defense industries
14. Chromium	N	5.2 -10.8 *(2011)	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
15. Copper (0 Sites exceeded the AL for Copper)	N	0.2 *(2011) 90th Percentile	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
17. Fluoride	N	0-.93	ppm	0.8-1.2	2	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
18. Lead (1 Sites exceeded the AL for Lead)	N	7.6 *(2011) 90th Percentile	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
20. Nitrate (as Nitrogen)	N	0 – 10	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nickel	N	0-4.2 *(2011)	ppb		100	Naturally Occurring

Volatile Organic Contaminants						
68.Haloacetic Acids (HAA5)	N	4.878 *(2010)	ppb	n/a	60	By-product of drinking water disinfection
76. TTHM Total trihalomethanes]	N	5.9 *(2010)	ppb	n/a	80	By-product of drinking water chlorination
79. Xylenes	N	0-.00062	ppm	10	10	Discharge from petroleum factories; discharge from chemical factories
Unregulated Inorganic Contaminants						
81. Sodium (Na)	N	17.8-56.8 (avg 32.0)	ppm	0	n/a	
82. Alkalinity (Alk)	N	15-185 (avg 80.7)	ppm		n/a	
83. pH	N	6.2-8.3 (avg 7.6)	ppm		6.5 – 8.5	
84. Chloride (Cl)	N	1.4-238 (avg 29.9)	ppm		250	
85. Hardness	N	16.6 *(2009)	ppm		n/a	
86. Total Dissolved Solids (TDS)	N	202 *(2010)	ppm		500	
Manganese	N	.2.1-46.6 (avg 20) *(2011)	ppb		50	
91. Sulfate	N	.7-3.8 (avg 1.7) *(2011)	ppm		250	

*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.

Lead-If present, elevated lead levels 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. Town of Greenwood 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 www.epa.gov/safewater/lead.

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.

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 level in your water is below the MCL.

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. In order to insure tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations established limits for contaminants in bottled water, which must provide the same protection for public health.

1)Microbial contaminants such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operation, and wildlife.

2)Inorganic contaminants, such as salts and metals can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharge, oil and gas production, mining, or farming.

3)Pesticides and herbicides, which may come from a variety of sources, such as agricultural, urban storm water runoff, and residential uses.

4)Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

5)Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

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. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having 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 the Town of Greenwood work around the clock to provide top quality water to every tap. 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.

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Tapping Into Good Health