North Castle Water District No.5

Annual Water Supply Report for 2009 Public Water Supply Id # 5903492

Introduction

To comply with State and Federal regulations, the Town of North Castle Water District No.5 is issuing an annual report describing the quality of your drinking water. The purpose of the report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources. This report provides an overview of last year's water quality. Included are details of where your water comes from, what it contains, and how it compares to State standards.

Is my drinking water safe? Absolutely!

Last year, as in years past, your tap water met all U.S. Environmental Protection Agency (EPA) and state drinking water Health standards. North Castle vigilantly safeguards its water supplies and once again we are proud to report that our System has never violated a maximum contaminant level or any other water quality standard.

Where does my water come from?

All water consumed in North Castle Water District No.5 during the past year was purchased from North Castle Water District No.4. All water pumped from North Castle Water District No.4 comes from a combination of six (6) wells. Two are located within the Town Park on the former IBM property, two are located within the Whippoorwill Ridge subdivision, and two are located on School Street. The water supply at each source is chlorinated; the supply at the School Street location is also filtered for iron removal prior to system distribution. Water District No. 5 serves approximately 350 people through 117 service connections.

The NYS DOH has evaluated the susceptibility of water supplies statewide to potential contamination under the Source Water Assessment Program (SWAP), and their findings are summarized in the paragraphs below. It is important to stress that these assessments were created using available information and only estimate the potential for source water contamination. Elevated susceptibility ratings do not mean that source water contamination has or will occur for this PWS. This PWS provides treatment and regular monitoring to ensure the water delivered to consumers meets all applicable standards.

Monitoring and reporting violations

There have been no reporting or monitoring violations during 2009.

Explanation of reasons for variance/exemption

The district is not operating under any variance or exemption.

IMPORTANT WATER CONSERVATION NOTICE

The need to conserve water during times of drought is obvious to all. It is just as important to use water wisely when the supply is plentiful. However, with the ever-increasing installation of automatic irrigation systems, it is mandatory that we begin a water conservation program relative to irrigation. Most systems have automatic programmable timers, in addition to which we will require that rain sensors be installed, so as to avoid needless watering. The following irrigation practices will be enforced for all irrigation. Homes with even numbered addresses will water even numbered days, and homes with odd numbered addresses will water on odd numbered days. These restrictions shall apply all year, even during non-drought periods. Your cooperation in this matter will be appreciated!

EDUCATIONAL INFORMATION

The safe drinking water act requires that the following information be included in this notice.

Are there contaminants in my drinking water?

In general, 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 can pick up substances resulting from the presence of animals or from human activities. Contaminants that may be present in source water include: microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations, which limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the FDA's regulations establish limits for contaminants in bottled water which 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 (800-426-4791).

SM----SM~w5awsr09.doc 1 of 4

Do I need to take special precautions?

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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

Water Quality Data Table

North Castle Water District No.5 is required by the State Sanitary Code, Subpart 5-1, to monitor raw water and treated water quality by collecting and analyzing samples for various contaminants. Raw water samples are collected annually for organic and inorganic contaminants. Treated water is also sampled annually for inorganic contaminants.

The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

Table of Detected Contaminants										
Contaminant	Violation Yes\No	Date of Sample	Level Detected (Maximum Range)	Unit Measure- ment	MCLG	Regulatory Limit (MCL, TT, or AL)	Likely Source of Contamination			
Microbiological Contaminants										
Total Coliform	No	1/09-12/09	0 Positive samples	N/A	0	MCL= 2 or more Positive samples	Naturally present in the environment			

Table of Detected Contaminants											
Contaminant	nt Violation Yes\No		Date of Sample	Level Detected (Maximum Range)	Unit Measure- ment	MCL	.G		ulatory Limit CL, TT, or AL)	Likely Source of Contamination	
Disinfection By	produ	icts									
(TTHMs chlorofo bromodichlorometh dibromodichlorome & bromoform)	Total Trihalomethanes ³ No TTHMs chloroform romodichloromethane ibromodichloromethane c bromoform)		7/16/09	11.76	μg/l	N/a N		MCI	_=80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.	
Haloacetic Acids (mono-,di-,& trichloroacetic acid, mono-&di-bromoac acid)	&	No	7/16/09	2.47	μg/l	N/a		MCL = 60		By-product of drinking water chlorination needed to kill harmful organisms	
Radiological C	ontam	inants	S								
Gross alpha activity including radium – 226 but excluding radon and uranium)		No	3/11/08	1.2- 7.88 4	pCi/L	0		MCL=15		Erosion of natural deposits	
Combined radium -226 and 228		No	3/11/08	6.56- 14.2 4	pCi/L	0		MCL=50		Erosion of natural deposit	
Uranium No		3/11/08 7/24/08	<mrl 7.5<="" td="" –=""><td>μg/l</td><td>0</td><td></td><td colspan="2">MCL=30</td><td colspan="2">Erosion of natural deposit</td></mrl>	μg/l	0		MCL=30		Erosion of natural deposit		
Inorganic Con	tamina	ants								-	
	No		7/14/09 7/15/09	0.27 (0.049-0.27)	Mg/l	2	MC	L=2	Discharge of drilling wastes, discharge from metal refineries; erosion of natural deposits		
Color	No		7/14/09 7/15/09	10 (<mrl-10)< td=""><td>Units</td><td>N/a</td><td>MC 5</td><td>L=1</td><td colspan="3">Large quantities of organic chemicals, inadequate treatment, high disinfection demand & the potential for production of excess amounts of disinfection by-products such as trihalomethanes, the presence of metals such as copper, iron & manganese; Natural color may be caused by decaying leaves, plants & organic soil matter.</td></mrl-10)<>	Units	N/a	MC 5	L=1	Large quantities of organic chemicals, inadequate treatment, high disinfection demand & the potential for production of excess amounts of disinfection by-products such as trihalomethanes, the presence of metals such as copper, iron & manganese; Natural color may be caused by decaying leaves, plants & organic soil matter.		
Chromium	No		7/14/09 7/15/09	7.1 (4.9-7.1)	μg/l	100	MC	L=100 Discharge from steel & pulp mills; Erosi of natural deposits			

SM----SM~w5awsr09.doc 2 of 4

Fluoride	No	7/14/09	0.306	Mg/l	N/a	MCL=2.2 Erosi		sion of natural deposits: additive		
		7/15/09	(0.238 - 0.306)				that pr	that promotes strong teeth		
Manganese	No	7/14/09	0.692	μg/l	N/a	MCL=	Natur	Naturally occurring		
		7/15/09	(.062-0.692)	' '		300Ug/l				
Nickel	No	7/14/09	6.3	μg/l	N/a	N/a	Dischar	Discharge from metal refining and chemical production		
		7/15/09	(1.9 - 6.3)	' '			product			
Nitrate No		7/14/09	0.692	Mg/l	10	MCL=10	Runoff	Runoff from fertilizer use; leaching from		
		7/15/09	(.062-0.692)				septic tanks, sewage; erosion of natural deposits			
Sodium	No	7/14/09	38.8	Mg/l	N/a	Water containing	containing more than 20mg/l should Naturall			
		7/15/09	(17.3 - 38.8)			, i		ple with severely restricted occurring;		
								r containing more than Road Salt;		
						_		ould not be used for water moderately restricted softeners;		
						sodium diets.	ne on mou	eratery restricted	Animal waste	
Sulfate	No	7/14/09	37.9	Mg/l	N/a	MCL=250				
		7/15/09	(25.8 - 37.9)							
Zinc	No	7/14/09	0.105	Mg/l	N/a	MCL=5 N		Naturally occurring; mining waste		
		7/15/09	(0.0054 - 0.105)							
LEAD & CO	OPPER									
Copper	No	7/17/2008-	0.64 1	Mg/l	1.3	AL=1.3		Corrosion of Galvanized pipes;		
* *			(0.0844-0.713)				erosion of natural deposits			
Lead	No	7/17/2008-	8.4 2	μg/l	15	AL=15		Corrosion of hous	sehold plumbing	
		8/1/2008	(<mrl-11.8)< td=""><td></td><td></td><td></td><td></td><td>systems; Erosion deposits</td><td>of natural</td></mrl-11.8)<>					systems; Erosion deposits	of natural	

<u>KEY:</u> ppb: = parts per billion, or micrograms per liter (μ g/l) **NA:** =Not applicable **ND:** =Not detected **NR:** = Not reported **MNR:** = Monitoring not required, but recommended. **ppm:** =parts per million, or milligrams per liter (μ g/l) **# of monthly positive samples:** = Number of samples taken monthly that were found to be positive

MCLG: =Maximum Contaminant Level Goal: 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. MRL: =Method Reporting Level-Lowest level of a particular contaminant that the lab can report for a specific analysis.

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. pCi/L;=picocuries per liter

AL: =Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

1-The level presented represents the 90th percentile of the 5 sites tested. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the copper values detected at your water system.

2-The level presented represents the 90th percentile of the 5 sites tested. The action level for lead was not exceeded at any of the sites tested.

3- Distribution system sample 4- Range for all six (6) wells collected 5- limit was exceeded on well supply not used during 2009

The previous table demonstrates that we have had no violations. We are proud to report that your drinking water meets or exceeds all Federal and State requirements. As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: total coliform, turbidity, inorganic compounds, nitrate, nitrite, lead & copper, volatile organic compounds, total trihalomethanes, and synthetic organic compounds. Although the samples illustrated are only a few of the many constituents we have sampled for, some of which have had detects. The EPA has determined that your drinking water is safe at these levels.

HARD vs. SOFT WATER

The hardness of water relates to the amount of calcium, magnesium and sometimes iron in the water. The more minerals present, the harder the water. Soft water may contain sodium and other minerals or chemicals; however, it contains very little calcium, magnesium or iron. Many people prefer soft water because it makes soap lather better, gets clothes cleaner and leaves less of a ring around the tub. Some municipalities and individuals remove calcium and magnesium, both essential nutrients, and add sodium in an ion-exchange process to soften water, the harder the water, the more sodium that must be added in exchange for calcium and magnesium ions to soften the water. This process has drawbacks from a nutritional standpoint.

LEAD

If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. 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. *North Castle* 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 http://www.epa.gov/safewater/lead. Sampling for lead was last performed during 2008. Due to previous sample results being below the action level, we are on a reduced monitoring program set by the state (every three years). We will sample again for lead during 2011.

Fluoridation

The water supplied in Water District No.5 is not Fluoridated!

For more information contact:
North Castle Water District No. 5
15 Business Park Drive
Armonk, New York 10504

waterandsewer@northcastleny.com

Attn: Anthony Futia, Superintendent

914-273-1882 Fax: 914-273-3075

OR

Westchester County Department of Health

914-813-5000

www.northcastleny.com

SM----SM~w5awsr09.doc 4 of 4