TOWN OF SUNAPEE
Water and Sewer Commission
P.O. Box 347, Sunapee, NH 03782-0347
(603) 763-2115

Sunapee Water Quality Report - 2013

Test Results for 2012 (1/12 – 12/12)

Is my drinking water safe?

We are pleased to report that our drinking water is safe and meets federal and state requirements.

What is the source of my water?

The Sunapee water system source is surface water from Lake Sunapee. The water intake pipe is about 35 feet below the surface and is located in Sunapee Harbor. This water is treated and distributed from the Slow Sand Filter Plant located on Harbor Hill. The Georges Mills water system source is two bedrock wells located on Pleasant Street.

Why are there contaminants in my water?

Drinking water, including bottled water, may reasonably be expected to contain at least small amount 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 (1-800-426-4791).

How can I get involved?

Questions regarding your water systems can be directed to David Bailey, Water & Sewer Superintendent, at 603-763-2115, 8:00 AM to 4:00 PM Monday – Friday. The Water & Sewer Office is located in the Town Hall at 23 Edgemont Road. The Water & Sewer Commission meets the last Thursday of each month, unless otherwise posted. Meeting notices are posted in the Town Hall, on the Town Web Site and in the Sunapee and Georges Mills Post Offices.

Other information

Water & Sewer Department Personnel: David Bailey – Superintendent, Christopher Roberts – Foreman, Arthur Mitts – Operator II, Aaron Cartier – Operator II, Joshua Archibald – Operator I, Ronald Oxland – General Laborer, John Bridgmon-General Laborer, Holly Leonard –Office Manager

Water & Sewer Commissioners: Theodore Gallup – Chairman, Peter Hill - Vice-Chairman, Kurt Markarian, Charles Smith, Paul Manson, Kenneth Meyer, David Cain.

Do I need to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 the 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 (1-800-426-4791).

Definitions: MCLG: Maximum Contaminant Level Goal, or 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. • MCLs: 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. • AL: Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow. • TT: Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water. pCi/l: picocuries per liter (a measure of radioactivity).

Environmental Protection Agency requires testing of 77 different contaminants. The following test results represent the only contaminants that were of a detectable level in the Sunapee Water System.

Abbreviations: PPT: Parts per trillion • ppb: parts per billion • ppm: parts per million or • n/a: not applicable • NTU: Nephelometric Turbidity Unit • MFL: million fibers per liter • nd: not detectable at testing limits.

Turbidity is a measure of the cloudiness of the water, and is used because it is a good indicator of how well the filtration treatment process is functioning.

2012 TEST RESULTS FOR SUNAPEE SYSTEM #2271010

Contaminant	Violation Y/N	Level Detected/ Range of Detection	Unit Meas.	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants						
Total Coliform Bacteria (% positive samples)	NO	0	ppm	0	Presence of coliform bacteria in ≥5% of compliance samples	Naturally present in the environment
Turbidity	NO	.079	NTU	n/a	1 NTU	Soil runoff
Fecal coliform and *E coli*	NO	0	ppm	0	a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or *E. coli* positive.	Human and animal fecal waste
Inorganic Contaminants						
Barium	NO	.011	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Copper	NO	0.14	ppm	1.3	1.3	Corrosion of household plumbing system; erosion of natural deposits; leaching from wood preservatives.
Lead	NO	.005	ppm	0	.015	Corrosion of household plumbing system; erosion of natural deposits.
Volatile Organic Contaminants						
Total HAA5	NO	48	ppb	0	60	By-product of drinking water chlorination
Total Trihalomethane	NO	68	ppb	0	80	By-product of drinking water chlorination

Health Effects Information:

Barium – Some people who drink water containing barium in excess of the MCL over may years could experience an increase in their blood pressure.

Copper – 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.

TThms (Total Trihalomethanes) – Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

HAA5s (Haloacetic Acids) – Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of developing cancer.

Lead – Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

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. This water system is responsible for high quality drinking water, but can't control the variety of materials used in your plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing cold water from your tap for at least 30 seconds before using water for drinking or cooking. Do not use hot water from drinking and 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://water.epa.gov/drink/info/lead/index.cfm.

Environmental Protection Agency requires testing of 77 different contaminants. The following test results represent the only contaminants that were of a detectable level in the Georges Mills Water System.

2012 TEST RESULTS FOR GEORGES MILLS SYSTEM #2271020

Contaminant	Violation Y/N	Level Detected/Range of Detection	Unit Meas.	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants						
Total Coliform Bacteria (% positive samples)	NO	0	ppm	0	Presence of coliform bacteria in ≥5% of compliance samples	Naturally present in the environment
Fecal coliform and *E coli*	NO	0	ppm	0	A routine sample and repeat sample are total coliform positive, and one is also fecal coliform or *E. coli* positive.	Human and animal fecal waste
Inorganic Contaminants (#) Represents 2011 Test Results						
Barium	NO	.015	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Copper #	NO	.142	ppm	1.3	1.3	Corrosion of household plumbing system; erosion of natural deposits; leaching from wood preservatives.
Lead #	NO	.004	ppm	0	.15	Corrosion of household plumbing system; erosion of natural deposits.
Fluoride	NO	.8	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Radioactive Contaminants (*) Represents 2005 Test Results						
Combined Radium *	NO	1.2	PCi/l	0	5	Erosion of natural deposits.
(Compliance) Gross Alpha	NO	3.6	PCi/l	0	15	Erosion of natural deposits.
Uranium	NO	14	PCi/l	0	30	Erosion of natural deposits.
Volatile Organic Contaminants (*) Represents 2010 Test Results						
TTHM's *	NO	6.7	ppb	0	80	By-product of drinking water chlorination.

Synthetic Organic Contaminants – did not exceed MCL.

Health Effects Information:

Barium – Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.

Combined Radium – Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.

Uranium – Some people who drink water containing uranium in excess of the MCL over many years may have an increased risk of getting cancer and kidney toxicity.

Gross Alpha – Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

Copper – 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.

TThms (Total Trihalomethanes) – Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

Lead – Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

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. This water system is responsible for high quality drinking water, but can't control the variety of materials used in your plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing cold water from your tap for at least 30 seconds before using water for drinking or cooking. Do not use hot water from drinking and 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://water.epa.gov/drink/info/lead/index.cfm.

Description of Drinking Water Contaminants:

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. Contaminants that may be present in source water include:

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

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

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

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

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

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The United States Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

NH Department of Environmental Services has prepared a Source Assessment Report for the source(s) serving this public water system. The results of the assessments are as follows. For the Sunapee system no susceptibility factors were rated high, 4 were rated medium, and 8 were rated low. For the George's Mills Water Works, no susceptibility factors were rated high, 2 were rated medium, and 10 were rated low. The complete Assessment Report is available for inspection at the Sunapee Water & Sewer Department office located at 23 Edgemont Road. For more information, call David Bailey, Water & Sewer Superintendent, or visit NH DES's Drinking Water Source Assessment Program web site at www.des.state.nh.us/dwspp.