

Water Quality Report – 2006

FARMINGTON

We are pleased to provide you with this year's annual water quality report. We want to keep you informed about the excellent water services we have delivered to you over the past year. Our goal is and always has been, to provide you a safe and dependable supply of drinking water.

What is the water quality of my drinking water? This report shows that our drinking water, in general, has excellent water quality. We had some bacteria violations in May/June 2005 which have been corrected and there are no other water quality violations.

What is the source of my water? The Farmington Water Department obtains its water from three gravel packed wells. Well #4 produces 225gpm, Well#5 produces 180gpm, and Well#6 produces 350gpm. Wells #2 and #3 have been shut down and no longer pump to the Town.

Why are contaminants in my water?

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of 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 US Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

How can I get involved? If you have any questions about this report or the water system in general, please call Dale Sprague at 755-4883. You may also attend any scheduled Selectmen's meeting where water related issues are discussed by calling the Selectmen's office at 755-2208 to obtain a date, time and agenda for the next meeting.

Other information: We experienced bacteria violations in May and June 2005 with a boil order in June for E. coli. We immediately started adding chlorine as a disinfectant that quickly resolved the problem. The Board of Selectmen decided for the time being to maintain the chlorine addition at all 3 wells. There have been no violations in the last 8 months.

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 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 (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.

MCL: Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. They 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.

MRDLG: Maximum residual disinfectant level goal or the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

MRDL: Maximum Residual Disinfectant Level or the highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants.

Abbreviations:

ppm: parts per million

pCi/L: pico curies per liter

ppb: parts per billion

nd: not detectable at testing limits

Sample Dates: The results for detected contaminants listed below are from the most recent monitoring done in compliance with regulations ending with the year 2005. Results prior to 2005 will include the date the sample was taken.

Radon: Radon is a radioactive gas that you can't see, taste or smell. It can move up through the ground and into a home through cracks and holes in the foundation. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. It is a known human carcinogen. Breathing radon can lead to lung cancer. Drinking water containing radon may cause an increased risk of stomach cancer. Presently EPA is reviewing a standard for radon in water.

DETECTED WATER QUALITY RESULTS

Contaminant (Units)	Level Detected Violation Yes or No	MCL	MCLG	Likely Source of Contamination	Health Effects
Microbiological Contaminants					
Total Coliform Bacteria	16 positive YES	< 40 samples one is positive	0	Naturally present in the environment	Coliforms are bacteria that are naturally present and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.
E. Coli Bacteria	1 positive YES	0	0	Human and animal fecal waste	Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely-compromised immune systems.
Radioactive Contaminants					
Radon (pCi/L)	1700 Range 1600-2900 Sample dates 8/2001 and 8/2003 NO	None	0	Erosion of natural deposits	Presently the US Environmental Protection Agency is reviewing a standard for radon in drinking water. See radon note above.

Combined Radium (pCi/L)	0.8 Range 0.1-0.8 Sample dates 6/2003 and 12/2003 NO	5	0	Erosion of natural deposits	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.
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Inorganic Contaminants

Barium (ppm)	0.0094 NO	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.
Copper (ppm)	Range 0.0571-0.4845 90 th percentile = 0.442 NO	AL=1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	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 (ppb)	Range ND-26.9 90 th percentile = 10 NO Number of Samples Above AL Was (1)	AL=15	0	Corrosion of household plumbing systems, erosion of natural deposits	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.
Nitrate (as Nitrogen) (ppm)	0.16-0.61 NO	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	(5 ppm through 10 ppm) 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 for advice from your health care provider.

Volatile Organic Contaminants

Chlorine (ppm)	0.21 Range 0.00-0.46	MRDL = 4	MRDL G = 4	Water additive used to control microbes	Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.
Haloacetic Acids (ppb)	34 NO	60	N/A	By-product of drinking water disinfection	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

Methyl tertiary-butyl ether (MTBE) (ppb)	Range ND-1.5 NO	13	13	A gasoline additive	The New Hampshire Bureau of Health Risk Assessment considers MTBE a possible human carcinogen.
TTHM (Take total of contaminants below) Bromodichloromethane Bromoform Dibromomethane Chloroform (ppb)	78 NO	80	N/A	By-product of drinking water chlorination	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.

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, and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater 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 activities.

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.

Source Water Assessment Summary:

The NH Department of Environmental Services has prepared a Source Water Assessment Report for the source(s) serving this community water system, assessing the sources' vulnerability to contamination. The results of the assessment, prepared on (12/30/2002), are as follows:

(Well #4), received (2) high susceptibility ratings, (2) medium susceptibility ratings, and (8) low susceptibility ratings.

(Well #5) received (1) high susceptibility ratings, (1) medium susceptibility ratings, and (10) low susceptibility ratings.

(Well # 6), received (3) high susceptibility ratings, (3) medium susceptibility ratings, and (6) low susceptibility ratings.

The complete Assessment Report is available for review at the Water Department office at 14 Baldwin Way.. For more information call Dale Sprague at 755-4883 or by e-mail at pubwks@metrocast.net or visit NH Department of Environmental Services Drinking Water Source Water Assessment Program web site at www.des.state.nh.us/dwspp.