



2011 Consumer Confidence Report Water Quality

City of Lebanon Department of Public Works

Water Filtration Facility

EPA Identification Number: 1321010

What is the quality of my drinking water?

The City of Lebanon Water Department is pleased to inform you that your drinking water meets or exceeds all federal and state requirements. We strive to deliver safe drinking water to our customers and to maintain a secure and protected facility. We are proud to deliver this annual Water Quality Report covering 2010.

Lebanon's Water Source and Assessment

Lebanon's surface water comes from the Greater Mascoma River Watershed, which encompasses 195 square miles to include Mascoma Lake, Goose Pond, and Crystal Lake. Based on United States Geological Data the usable capacity of these reservoirs is 7.93 billion gallons. In 2010 the Lebanon water works processed 599.66 million gallons of water with an average daily production of 1.64 million gallons. This is 1.54 % more water than was processed in 2009.

The protection of our source water is a very important objective. The goals of our Source Water Protection Program are to protect public health by preventing episodes of drinking water contamination, and to maintain and improve water quality in order to reduce treatment costs. Components of the program include delineation and mapping of the watershed, inventory and inspection of potential contamination sources, educational activities, and mailings. As a result of our programs success we receive a reduced frequency of monitoring by regulatory agencies.

NH Department of Environmental Services has prepared a Source Assessment Report for the source serving this public water system, assessing the sources' vulnerability to contamination. The results of the assessment, prepared on May 6, 2002 are as follows: for the Mascoma River, (4) susceptibility factors were rated as high, (4) were rated medium, and (4) were rated low. For more information, about the susceptibility factors contact NH-DES at (603) 271-3139 or contact the Water Treatment Plant Superintendent at 448-2514. The complete assessment report is available for review at the City of Lebanon Water Plant, 65 Pumping Station Rd. Lebanon.

The Water Treatment Plant

Lebanon treats your water with a conventional treatment process that utilizes coagulation, flocculation, sedimentation, filtration and disinfection to remove or reduce harmful contaminants that are or may be present in the source water. The facility provides a series of treatment steps; processes of coagulation, flocculation and sedimentation utilize polyaluminum chloride and activated carbon to remove naturally occurring contaminants that include algae that may affect color and taste as well as reducing turbidity, total organic carbon and bacteria. Multi-media filtration, (sands and anthracite coal) is used to remove particles and microbes, which escape the sedimentation process. Sodium Hypochlorite (a liquid form of chlorine), is used to disinfect water. In addition, to minimize lead and copper leaching from plumbing materials, we treat your water for corrosion control. Sodium carbonate is added to raise pH and sodium bicarbonate is added to raise alkalinity to provide buffered, less corrosive water. Sodium Fluoride is added to promote dental health.

Where Can I get More Information?

For more information about your drinking water contact the Water Treatment Plant Superintendent, Jim Angers at (603) 448-2514, e-mail water@lebcity.com, or by writing to 65 Pumping Station Road, Lebanon, NH 03766. Also, you may visit our website at www.water.lebnh.net. Additional information is available from the Safe Drinking Water Hotline (800-426-4791). You are welcome and encouraged to attend Lebanon City Council meetings on the 1st and 3rd Wednesdays of each month. The meetings begin at 7:00 p.m. and are held in City Council Chambers unless otherwise announced. City Council Chambers are located in City Hall, 51 North Park Street, Lebanon, NH 03766. Visit www.Lebcity.com or call City manager's office at (603) 448-4220 for more information.

Additional information on Lead

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. If you are concerned about elevated lead levels in your home's water, you may wish to have your water

tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline 800-426-4791 or <http://water.epa.gov/drink/info/lead/index.cfm> .

Do I need to take special precautions?

Some people may be more vulnerable to contaminants 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).

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).

Dispose of unused pharmaceuticals properly. Do not flush or dispose in drains or toilets as these contaminants may find their way into drinking water supplies.

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.

The Water Quality Table

The table contains the most recent results up to December 2010. It lists only the drinking water contaminants we detected that are applicable for the calendar year of this report. Lead & Copper testing is done on a three year cycle and the next sampling is due July through September 2011.

Terms and Definitions:

The following definitions explain abbreviations used in the Water Quality Table:

MCL: Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. They are set as close to the MCLG's as feasible using the best available treatment technology. **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. MCLG's allow for a margin of safety. **NTU:** Nephelometric Turbidity Unit, Turbidity is a measure of the cloudiness of the water. It is monitored by surface water systems because it is a good indicator of water quality and thus helps measure the effectiveness of the treatment process. High turbidity can hinder the effectiveness of disinfectants.

Abbreviations used in the Water Quality Table: **AL:** Action Level, **MRDL:** Maximum Residual Disinfectant Level, **MRDLG:** Maximum residual disinfectant level goal, **NTU:** Nephelometric Turbidity Unit, **PPB:** parts per billion, **PPM:** parts per million, **RAA:** Running Annual Average **TT:** Treatment Technique,

SMCLs, secondary maximum contaminant levels, EPA does not enforce these secondary maximum contaminant levels. They are established only as guidelines to assist public water systems in managing their drinking water for aesthetic considerations. These contaminants are not considered to present a risk to human health at the SMCL.

2010 Water Quality Table

Non-Regulated Contaminants

Non-Regulated Substances and Water Quality Parameters

Substance or Parameter	Level Detected	Range of Detection	Unit	SMCL	Violation	Year Sampled	Noticeable effects above SMCL
Sulfate	5		mg/L	250	NO	2010	Salty Taste
Manganese	0.035		mg/L	0.05	NO	2010	Black to Brown staining, bitter taste
Color	3	2 to 4	unit	15	NO	2010	Visible tint
Chloride	20		mg/L	250	NO	2010	Salty Taste
Hardness	15	11 to 24	mg/L	N/A	NO	2010	
pH	8.4	6.92 to 8.97	units	N/A	NO	2010	A measure of the acidity or alkalinity
Alkalinity	37 average	22 to 40	mg/L	N/A	NO	2010	

FACTS ABOUT BOTTLED WATER BYPRODUCTS

- At least 90 percent of the price of a bottle of water is for things other than the water itself, like bottling, packaging, shipping and marketing.
- 44 percent of ‘purified’ bottled water sold in the U.S. started out as municipal water.
- 827,000 to 1.3 million tons of plastic PET water bottles were produced in the U.S. in 2006, requiring the energy equivalent of 50 million barrels of oil. 76.5 percent of these bottles ended up in landfills
- Between 1997 and 2007, bottled water consumption in the U.S. more than doubled, from 13.4 gallons per person to 29.3 gallons per person.
- 26 to 41 percent of the 2.4 million tons of PET plastic discarded every year is bottled water bottles
- Because plastic water bottles are shielded from sunlight in landfills, they will not decompose for thousands of years
- It takes about 1,100 to 2,000 times as much energy to produce and transport the average bottle of water to Los Angeles as to produce the same amount of tap water

For more information on waste and recycling: <http://www.cleanair.org/Waste/wasteFacts.html>