Annual WATER QUALITY REPORT

Reporting Year 2011

Presented By

Town of Burlington, DPW, Water Dept.

PWS ID#: 3048000

Meeting the Challenge

We are once again proud to present our annual water quality report covering all testing performed between January 1 and December 31, 2011. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Please share with us your thoughts or concerns about the information in this report. After all, well-informed customers are our best allies.

Community Participation

The public is encouraged to participate and make comments on concerns about the town water system. In the Town of Burlington, the Board of Selectmen is made up of the Water and Sewer Commissioners. Board meetings are held on the first and third Mondays of each month at 7:00 p.m., and all residents can address the board at these meetings during "Citizens' Time." During July and August, meetings are held once a month and are posted in the newspaper.

Questions?

For more information about this report, or for any questions relating to your drinking water, please call Bill Keene, Water Quality Production Manager, at (781) 270-1648.

The Benefits of Fluoridation

Fluoride is a naturally occurring element in many water supplies in trace amounts. In our system, the fluoride level is adjusted to an optimal level averaging one part per million (ppm) to improve oral health in children. At this level, it is safe, odorless, colorless, and tasteless. Our water system has been providing this treatment since 1993. There are over 3.9 million people in 140 Massachusetts water systems and 184 million people in the U.S. who receive the health and economic benefits of fluoridation.

How Long Can I Store Drinking Water?

The disinfectant in drinking water will eventually dissipate even in a closed container. If that container housed bacteria prior to being filled with tap water, the bacteria may continue to grow once the disinfectant has dissipated. Some experts believe that water could be stored up to six months before needing to be replaced. Refrigeration will help slow the bacterial growth.

Water Treatment Process

The Town of Burlington operates two treatment plants at opposite sides of Town. These plants are totally different, with the Mill Pond facility being a surface water treatment facility and the Vine Brook facility treating only ground water.

The Mill Pond WTF is a physical-chemical treatment comprising rapid mix, flocculation, sedimentation, and filtration. The primary chemical during this process is polyaluminum chloride (PACL), which chemically separates out the impurities. The filters separate out the fine particles to prepare the water for the final step in the contact chamber. This process protects against Giardia and *Cryptosporidium* with chlorine. In the final step. ammonia is added to lower Trihalomethane and Haloacetic acid formation. In this step, a polyphosphate for corrosion control and fluoride are added before the water goes out into the system.

The Vine Brook Facility treats only ground water by oxidizing out the mineral content and then air stripping out the volatile organics that were found in the aquifer. This facility uses the same chemicals as the Mill Pond Facility for corrosion control and fluoridation.

If there are any questions on processes or chemicals used, please call Bill Keene, Water Quality Production Manager, at (781) 270-1648.

Where Does My Water Come From?

The Town of Burlington has produced water for its residents since 1949. We have accomplished this by making major investments in the sources, distribution, storage, and treatment facilities needed to operate a sophisticated town-wide system.

Burlington's water system consists of three finished water storage tanks with a capacity of 6 million gallons, approximately 130 miles of distribution piping, one river diversion station with a pumping capacity of 8 million gallons per day (MGD), one raw water storage reservoir with a capacity of 513 million gallons, one surface water treatment facility, one groundwater treatment facility, and several gravel-packed wells. These sources produced just under 1,144 million gallons in 2011, with a daily average of 3.2 million gallons per day (MGD) and a maximum day of 7.1 million gallons. While the daily average has remained constant for the past several years, the major consumer has changed from commercial to residential.

Groundwater Sources (Wells)

Groundwater sources are located in the Vine Brook Aquifer. Wells range in depth from 30 to 100 feet and have a maximum withdrawal volume of 250 to 1,000 gallons per minute. The wells are not under the influence of the surface water due to a confining layer of fine clay. The groundwater sources were not always treated prior to distribution, but since 2000 all groundwater is treated for the removal of iron, manganese, and volatile organic chemicals at the Vine Brook facility. This facility also addresses corrosion by pH adjustment, and a blend of polyphosphate is added to prevent metals found in household piping, such as lead and copper, from accumulating in drinking water. A state-of-the-art chloramination system is used for disinfection and prevention of trihalomethane (THM) and haloacetic acid (HAA5) formation. Fluoride is added for good dental health.

Mill Pond Surface Water Plant

The Mill Pond Water Treatment Facility, which opened in April 1973, is a Standard Physical Treatment Facility. Since December 2006, the Mill Pond Facility completed a 7.5 million dollar upgrade to meet current and future regulatory mandates. These upgrades included new intake pre-screening to prevent foreign matter from reaching the plant. The treatment facility rapid mix and flocculation system is upgraded to a two-stage operation for better removal of Total Organic Carbon (TOC) as mandated by the Federal EPA. The treatment facility underwent a complete filter upgrade including a state of the art filter-to-waste system. This system helps minimize particulate breakthrough and helps us meet current Turbidity standards. The treatment support utilities are also modernized; these include all electrical and chemical treatment systems. The treatment facility has room for UV contact chambers should micro-organism standards change in the future.

The Mill Pond Water Treatment Facility and Mill Pond Reservoir are located in the northeast corner of the Town adjacent to the Towns of Wilmington and Woburn. The Mill Pond Reservoir is an off-stream storage pond consisting of one main dam and two smaller dikes containing approximately 513 million gallons with a surface area of 64 acres. Water to the reservoir comes from the Shawsheen River, approximately 6 miles north, using a diversion station that is operated during high flow stages.

If there are any questions on the facility, please contact Bill Keene, Water Quality Production Manager at (781) 270-1648.

Burlington's Storage and Distribution System

The Burlington water system consists of approximately 130 miles of piping, ranging in size from 4 to 24 inches. The backbone of the system is a series of 16- to 24-inch transmission pipes that connect the three storage tanks and outer neighborhoods, preventing many problems due to water hydraulics. The town owns three covered and elevated storage tanks, each with a maximum elevation of 375 feet above mean sea level. The tanks have a total volume of 6 million gallons. These tanks help maintain water pressure, fire protection, and reserve volume in times of high demand. All three tanks are monitored 24 hours a day for elevation levels, which are recorded at the treatment facilities. This information allows production facilities to operate without over-pressurizing the distribution system.

Since the Town of Burlington ranges in elevation, water pressure varies from a low of approximately 55 psi to a high of 115 psi. It is recommended that all residents test for pressure, and if the static pressure is 80 or above, a pressure-reducing valve is recommended. This device will save fixtures and hot water tanks from wear fatigue.

Water Treatment Facility Security

All water structures and facilities have some form of security, ranging from fencing and lighting to complete intrusion alarm systems. It is requested that all residents be the eyes and ears of the system, and if any problems arise or if you see something suspicious, please call the authorities.

All water treatment facilities have continuous monitors for process and quality control. In the not-too-distant future, the facilities' Supervisory Control Data Acquisition System will be upgraded to help with the system control and to notify personnel of potential problems.

Water Conservation

You can play a role in conserving water and save yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water-using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

Water Main Flushing

Distribution mains (pipes) convey water to homes, businesses, and hydrants in your neighborhood. The water entering distribution mains is of very high quality; however, water quality can deteriorate in areas of the distribution mains over time. Water main flushing is the process of cleaning the interior of water distribution mains by sending a rapid flow of water through the mains.

Flushing maintains water quality in several ways. For example, flushing removes sediments like iron and manganese. Although iron and manganese do not pose health concerns, they can affect the taste, clarity, and color of the water. Additionally, sediments can shield microorganisms from the disinfecting power of chlorine, contributing to the growth of microorganisms within distribution mains. Flushing helps remove stale water and ensures the presence of fresh water with sufficient dissolved oxygen, disinfectant levels, and an acceptable taste and smell.

During flushing operations in your neighborhood, some short-term deterioration of water quality, though uncommon, is possible. You should avoid tap water for household uses at that time. If you do use the tap, allow your cold water to run for a few minutes at full velocity before use and avoid using hot water, to prevent sediment accumulation in your hot water tank.

Please contact us if you have any questions or if you would like more information on our water main flushing schedule.

What's Your Water Footprint?

You may have some understanding about your carbon footprint, but how much do you know about your water footprint? The water footprint of an individual, community, or business is defined as the total volume of freshwater that is used to produce the goods and services that are consumed by the individual or community or produced by the business. For example,11 gallons of water are needed to irrigate and wash the fruit in one half-gallon container of orange juice. Thirty-seven gallons of water are used to grow, produce, package, and ship the beans in that morning cup of coffee. Two hundred and sixty-four gallons of water are required to produce one quart of milk, and 4,200 gallons of water are required to produce two pounds of beef.

According to the U.S. EPA, the average American uses about 100 gallons of water daily. In fact, in the developed world, one flush of a toilet uses as much water as the average person in the developing world allocates for an entire day's cooking, washing, cleaning, and drinking. The annual American per capita water footprint is about 8,000 cubic feet, twice the global per capita average. With water use increasing six-fold in the past century, our demands for freshwater are rapidly outstripping what the planet can replenish.

To check out your own water footprint, go to www.h2oconserve.org or visit www.waterfootprint.org to see how the water footprints of other nations compare.

Information on the Internet

The U.S. EPA Office of Water (www.epa.gov/watrhome) and the Centers for Disease Control and Prevention (www.cdc.gov) Web sites provide a substantial amount of information on many issues relating to water resources, water conservation, and public health. Also, the DEP has a Web site (www.mass.gov/dep) that provides complete and current information on water issues in Massachusetts, including valuable information about our watershed.

Lead in Home Plumbing

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. We are responsible for providing high-quality drinking water, but we 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.

Important Health Information

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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or http://water.epa.gov/drink/hotline.

Source Water Assessment

The Department of Environmental Protection (DEP) has completed source water assessments for all drinking water sources across Massachusetts. The purpose of this Source Water Assessment Program (SWAP) was to determine the susceptibility of each drinking water source (well or surface water intake) to potential contaminant sources. The relative susceptibility rating for all our wells was high. The susceptibility rating for the Shawsheen River was also rated as high while the Mill Pond Reservoir was given a rating of moderate. It is important to understand that these susceptibility ratings do not imply poor water quality, but rather the system has a potential to become contaminated within the assessment area.

The complete SWAP report is available at the Burlington Department of Public Works and online at www.mass.gov/dep/water/drinking/3048000.pdf. For more information, call Bill Keene at (781) 270-1648.

What's a Cross-connection?

Cross-connections that contaminate drinking water distribution lines are a major concern. A cross-connection is formed at any point where a drinking water line connects to equipment systems containing chemicals (boilers, air conditioning systems, fire sprinkler systems, irrigation systems) or water sources of questionable quality. Cross-connection contamination can occur when the pressure in the equipment or system is greater than the pressure inside the drinking water line (backpressure). Contamination can also occur when the pressure in the drinking water line drops due to fairly routine occurrences (main breaks, heavy water demand), causing contaminants to be sucked out from the equipment and into the drinking water line (backsiphonage).

Outside water taps and garden hoses tend to be the most common sources of cross-connection contamination at home. The garden hose creates a hazard when submerged in a swimming pool or when attached to a chemical sprayer for weed killing. Garden hoses that are left lying on the ground may be contaminated by fertilizers, cesspools, or garden chemicals. Residents are encouraged to obtain a hose bib vacuum breaker. Improperly installed valves in your toilet could also be a source of cross-connection contamination.

Community water supplies are continuously jeopardized by cross-connections unless appropriate valves, known as backflow prevention devices, are installed and maintained. We have surveyed all industrial, commercial, and institutional facilities in the service area to make sure that all potential cross-connections are identified and eliminated or protected by a backflow preventer. We also inspect and test each backflow preventer to make sure that it is providing maximum protection.

For more information, review the Cross-Connection Control Manual from the U.S. EPA's Web site at http://water.epa.gov/infrastructure/drinkingwater/pws/crossconnectioncontrol/index.cfm. You can also call the Safe Drinking Water Hotline at (800) 426-4791.

New Arsenic Regulation

Arsenic contamination of drinking water sources may result from either natural or human activities. Volcanic activity, erosion of rocks and minerals, and forest fires are natural sources that can release arsenic into the environment. Although about 90 percent of the arsenic used by industry is for wood preservative purposes, it is also used in paints, drugs, dyes, soaps, metals, and semiconductors. Agricultural applications, mining, and smelting also contribute to arsenic releases. Arsenic is usually found in the environment combined with other elements such as oxygen, chlorine, and sulfur (inorganic arsenic), or combined with carbon and hydrogen (organic arsenic). Organic forms are usually less harmful than inorganic forms.

Low levels of arsenic are naturally present in water: about 2 parts arsenic per billion parts of water (ppb). Thus, you normally take in small amounts of arsenic in the water you drink. Some areas of the country have unusually high natural levels of arsenic in rock, which can lead to unusually high levels of arsenic in water.

In January 2001, the U.S. EPA lowered the arsenic Maximum Contaminant Level (MCL) from 50 to 10 ppb in response to new and compelling research linking high arsenic levels in drinking water with certain forms of cancer. All water utilities were required to implement this new MCL in January 2006.

Removing arsenic from drinking water is a costly procedure but well worth the expenditure considering the health benefits. For a more complete discussion, visit the U.S. EPA's arsenic Web site at http://water.epa.gov/lawsregs/rulesregs/sdwa/arsenic/index.cfm.

Naturally Occurring Bacteria

The simple fact is, bacteria and other microorganisms inhabit our world. They can be found all around us: in our food, on our skin, in our bodies, and in the air, soil, and water. Some are harmful to us and some are not. Coliform bacteria are common in the environment and are generally not harmful themselves. The presence of this bacterial form in drinking water is a concern because it indicates that the water may be contaminated with other organisms that can cause disease. Throughout the year, we tested many water samples for coliform bacteria. In that time, a few of the samples did show positive for the bacteria. Federal regulations now require that public water that tests positive for coliform bacteria must be further analyzed for fecal coliform bacteria. Fecal coliform are present only in human and animal waste. Because these bacteria can cause illness, it is unacceptable for fecal coliform to be present in water at any concentration. Our tests indicate no fecal coliform is present in our water.

About Our Violations

On September 26, 2011, the Town of Burlington received a Non-Compliance for a Fecal coliform and E. coli occurrence. A boil order was issued on Monday and lifted on Wednesday after three consecutive rounds of Bacteria samples came back negative. Coliforms are bacteria that are naturally present in the environment 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. The exact cause may not be known, but many operational changes were made. These changes include additional testing, system flushing modifications, and charting of system monitoring results.

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.

In the month of September, the Town performed a total of 108 bacteria tests; 7 tests confirmed positive for a total percentage of 6.5 (The USEPA allows 5.0 percent positive samples). Coliforms are bacteria that are naturally present in the environ¬ment 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. If there are any questions please call (781) 270-1648.

The Town of Burlington received in April 2012 a NON-Compliance notice for the failure to report by April 10th 2012 the Inorganic tests required during the 1st quarter. The samples were taken in February and all tests were performed but the outside contract lab failed to electronically report the results to the state system. All results were sent to the Town and were reviewed with the expectation that the state also had a copy. The Town Water Quality - Production Manager has talked to the outside laboratory to insure this doesn't happen again.

Substances That Could Be in Water

To ensure that tap water is safe to drink, the Department of Environmental Protection (DEP) and the U.S. Environmental Protection Agency (U.S. EPA) prescribe regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) and Massachusetts Department of Public Health (DPH) 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 these contaminants does not necessarily indicate that the water poses a health risk.

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. Substances 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 may result from urban stormwater runoff, industrial or domestic waste 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 which may also come from gas stations, urban storm water runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Sampling Results

During the past year, we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The state requires us to monitor for certain substances less often than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Arsenic (ppb)	2011	10	0	ND	ND–2.0	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2011	2	2	ND	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chlorine (ppm)	2011	[4]	[4]	1.87	1.2–1.95	No	Water additive used to control microbes
Fecal coliform and E. coli (# positive samples)	2011	0	0	3	NA	Yes	Human and animal fecal waste
Fluoride (ppm)	2011	4	4	1.08	0.93–1.27	No	Water additive that promotes strong teeth
Haloacetic Acids [HAAs] (ppb)	2011	60	NA	14	ND–23	No	By-product of drinking water disinfection
Nitrate (ppm)	2011	10	10	0.68	0.16–0.70	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb)	2011	80	NA	14	ND–18	No	By-product of drinking water disinfection
Total Coliform Bacteria (# positive samples)	2011	Presence of coliform bacteria in 5% of monthly samples		6.5	NA	Yes	Naturally present in the environment
Total Organic Carbon[1] (ppm)	2011	TT	NA	2.25	2.1–2.5	No	Naturally present in the environment
Turbidity[2] (NTU)	2011	TT	NA	0.27	0.08–0.27	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2011	TT	NA	100	NA	No	Soil runoff

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Lead (ppb)	2011	15	0	2	0/33	No	Corrosion of household plumbing systems; Erosion of natural deposits

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	2011	250	NA	130	90–130	No	Runoff/leaching from natural deposits
Copper (ppm)	2011	1.0	NA	0.221	ND–0.221	No	Corrosion of household plumbing systems; Erosion of natural deposits
Fluoride (ppm)	2011	2.0	NA	1.02	0.97–1.27	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Iron (ppb)	2011	300	NA	120	ND–230	No	Leaching from natural deposits; Industrial wastes
Manganese[3] (ppb)	2011	50	NA	183	ND–0.18	No	Leaching from natural deposits
pH (Units)	2011	6.5-8.5	NA	7.97	7.9–8.2	No	Naturally occurring

UNREGULATED SUBSTANCES [4]

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Bromodichloromethane (ppb)	2011	8.4	1.6–8.4	By-product of disinfection
Bromoform (ppb)	2011	6.2	ND–6.2	By-product of disinfection
Chloroform (ppb)	2011	8.1	ND–8.1	By-product of disinfection
Dibromochloromethane (ppb)	2011	4.9	ND–4.9	By-product of disinfection
Sodium (ppm)	2011	69	68–82	Runoff from road treatment

OTHER SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Alkalinity (ppm)	2011	21	19–23	Calcium carbonate residual
Calcium (ppm)	2011	17	4–17.5	Naturally occurring
Hardness (ppm)	2011	68	56–110	Naturally occurring
Potassium (ppm)	2011	9.1	NA	By-product of water processing

[1] The TOC Organic Carbon of surface water effluent range is 2.1 low to 2.5 high, with a removal percentage range of 51 to 54%. The required removal percentage is 45% based on current treatment technology (TT).

[2] Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

[3] Manganese is a naturally occurring mineral. At a level greater than 50 ppb, the water will appear brown, taste unpleasant, and may leave black stains on fixtures or on laundry. While manganese is part of a healthy diet, it can be harmful if consumed in large concentrations; infants should not drink water that contains manganese above this level, especially if they are bottle fed. The U.S. EPA has established a lifetime health advisory (HA) of 300 ppb for manganese to protect against concerns of potential neurological effects, and a one-day and 10-day HA of 1000 ppb for acute exposure.

[4] Unregulated contaminants are those for which the U.S. EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining their occurrence in drinking water and whether future regulation is warranted.

Definitions

90th Percentile: Out of every 10 homes sampled, 9 were at or below this level.

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

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.

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.

MRDL (Maximum Residual Disinfectant Level): 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.

MRDLG (Maximum Residual Disinfectant Level Goal): 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.

NA: Not applicable

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.