Village of Lemont

2014 Water Quality Report

July 2015 | Department of Public Works | (630) 257-2532

Annual Drinking Water Quality Report

January 1 to December 31, 2014

Water System Improvements in 2014. During the 2014 reporting period, water system projects were completed to improve and expand the Village water distribution system. Water mains were replaced on East Street. Water mains were replaced and upgraded on Warner Avenue from Norton Avenue to just about Roberta Avenue. Two new valves were installed, one on State Street, the other on Hillview Drive.

Sources of Drinking Water
Where does it come from?

The Village of Lemont water distribution system consists of approximately 75 miles of looped water main. Four deep wells and one shallow emergency well provide an average of 2,500,000 gallons of water per day to Village residents. These wells have the ability to pump 4,250 gallons per minute or over 6,000,000 gallons per day. Two elevated storage tanks and one ground reservoir can store up to 1,600,000 gallons of water.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater wells. As water travels over the surface of the land or through the ground, it can dissolve naturally occurring minerals and radioactive material and can pick up substances resulting from the presence of animals or from human activity.

Testing Requirements

Once again we are proud to report that in the year 2014 the water quality in Lemont met all of the USEPA drinking water requirements and standards.

This year, as in years past, your tap water was tested according to federal and state drinking water health standards. The Lemont Public Works Department vigilantly safeguards the Village's groundwater supply and is working hard to continue providing the best water possible.

The United States Environmental Protection Agency (USEPA) requires all communities to provide to their customers a Consumer Confidence Report on the quality of their system's drinking water. This report summarizes the quality of water that we provided during the last year. Included are details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies.

Susceptibility to Contamination

The Illinois EPA has determined that the Lemont Community Water Supply's source water has a **low susceptibility to contamination.** This determination is based on a number of criteria including: monitoring conducted at the wells; monitoring conducted at the entry point to the distribution system; and the available hydrogeologic data on the wells.

Furthermore, in anticipation of the U.S. EPA's proposed Ground Water Rule, the Illinois EPA has determined that the Lemont community water supply has a low susceptibility to viral contamination. This determination is based upon the completed evaluation of the following criteria during the Vulnerability Waiver Process: the community's wells are properly constructed with sound integrity and property site conditions; a hydrogeologic barrier exists which prevents pathogen movement; all potential routes and sanitary defects have been mitigated so that the source water is adequately protected; monitoring data did not indicate a history of disease outbreak and the sanitary survey of the water supply did not indicate a viral contamination threat. Because the community's wells are constructed in a confined aquifer, which should prevent the movement of pathogens into the wells, well hydraulics were not considered to be a significant factor in the susceptibility determination. Hence, well hydraulics were not evaluated for this groundwater supply.

Based on information obtained in a Well Site Survey, published in 1993 by the Ilinois EPA, four potential secondary sources were identified within the survey area of Lemont's wells. Furthermore, information provided by the Leaking Underground Storage Tank and Remedial Project Management Sections of the Illinois EPA indicated several additional sites with ongoing remediations which may be of concern.

EPA Safe Drinking Water Hotline

800-426-4791

Regulations

In order to ensure that tap water is safe to drink, U.S.E.P.A. prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Contaminants That May Be Present in Source Water

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 EPA's Safe Drinking Water Hotline at (800) 426-4791.

Microbial contaminents

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 occuring 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.

Protection Efforts:

The Illinois EPA provides minimum protection zones of 200 feet for Lemont's wells, which are regulated by the IEPA. To further reduce the risk to source water, the Village has implemented a source water protection program which includes the proper abandonment of potential routes of groundwater contamination and correction of sanitary defects at the water treatment facility. This effort resulted in the community water supply receiving a special exception permit from the Illinois EPA which allows a reduction in monitoring. The outcome of this monitoring reduction has saved the community considerable laboratory analysis costs.

2014 WATER QUALITY DATA

Regulated Contaminants Detected in 2014

Regulated Contaminants

Disinfectants & Disinfection By Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contaminant
Chlorine	12/31/2014	0.6	0.6 - 0.7	MRDLG=4	MRDL=4	ppm	NO	Water additive used to control microbes.
Inorganic Contaminants	**Collection Date**	**Highest Level Detected**	**Range of Levels Detected**	**MCLG**	**MCL**	**Units**	**Violation**	**Likely Source of Contaminant**
Arsenic	2013	1.7	1.7 - 1.7	0	10	ppb	NO	Erosion of natural deposits; run-off from orchards; runoff from glass and electronics production wastes.
Barium	2013	0.0034	0.0034 - 0.0034	2	2	ppm	NO	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Chromium	2013	4	4 - 4	100	100	ppb	NO	Discharge from steel and pulp mills; erosion of natural deposits.
Fluoride	2013	1.21	1.21 - 1.21	4	4.0	ppm	NO	Erosion of natural deposits; water additive to promote strong teeth; discharge from fertilizer and aluminum factories.
Iron	2013	0.25	0.25 - 0.25		1.0	ppm	NO	Erosion of natural deposits.
Manganese	2013	6.2	6.2 - 6.2	150	150	ppb	NO	Erosion of natural deposits.
Sodium	2013	210	210 - 210			ppm	NO	Erosion of natural occurring deposits; used in water softener regeneration.
Zinc	2013	0.0083	0.0083 - 0.0083	5	5	ppm	NO	Naturally occurring; discharge from metal factories.
Radioactive Contaminants	**Collection Date**	**Highest Level Detected**	**Range of Levels Detected**	**MCLG**	**MCL**	**Units**	**Violation**	**Likely Source of Contaminant**
Combined Radium 226/228	2014	13.3	0.856 - 13.3	0	5	pCi/L	NO	Erosion of natural deposits.
Gross Alpha excluding radon and uranium	2014	1.00	2.5 - 13.8	0	15	pCi/L	NO	Erosion of natural deposits.
Volatile Organic Contaminants	**Collection Date**	**Highest Level Detected**	**Range of Levels Detected**	**MCLG**	**MCL**	**Units**	**Violation**	**Likely Source of Contaminant**
Ethylbenzene	2014	6.2	0 - 6.2	700	700	ppb	NO	Discharge from petroleum refineries.
Toluene	2014	0.0014	0 - 0.0014	1	1	ppm	NO	Discharge from petroleum factories.
Xylenes	2014	0.004	0 - 0.015	10	10	ppm	NO	Discharge from petroleum factories; Dischage from chemical factories.

Consumer Confidence Rule

The Consumer Confidence Rule requires community water systems to prepare and provide to their customers annual consumer confidence reports on the quality of the water delivered by the systems.

Violation Type	Violation Begin	Violation End	Violation Explanation
CCR REPORT	07/01/2014	07/03/2014	Notification of the annual Water Quality Report was sent to residents; however, it was not done by the deadline of July 1, 2014.

Note: The state requires monitoring of certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some of this data may be more than one year old.

Unregulated Contaminant Monitoring Rule (UCMR3)[1]				
Substance (Units)	Year Sampled	Amount Detected (Average)	Range of Detections (lowest - highest)	Typical Source
1,1-Dichloroethane	2014		< .03	Halogenated alkane, used as a solvent.
1,2,3-trichloropropane	2014		< .03	Halogenated alkane; used as an ingredient in paint, varnish remover, solvents and degreasing agents.
1,3-butadiene	2014		< .1	Alkene; used in rubber manufacturing and occurs as a gas.
1,4-Dioxane	2014		< .07	Cyclic aliphatic ether; used as a solvent or solvent stabilizer in manufacture and processing of paper, cotton, textile products, automotive coolant, cosmetics, and shampoos, cleaning agent, surface coating, and adhesive agent.
Bromochloromethane	2014		< .06	Used as a fire-extinguishing fluid, an explosive suppressant, and as a solvent in the manufacturing of pesticides.
Bromomethane	2014		< .02	Halogenated alkane; occurs as a gas, and used as a fumigant on soil before planting, on crops after harvest, on vehicles and buildings, and for other specialized purposes.
Chlorate	2014		< 20	Agricultural defoliant or desiccant; disinfection byproduct; and used in production of chlorine dioxide.
Chlorodifluoromethane	2014		< .08	Chlorofluorocarbon; occurs as a gas, and used as a refrigerant, as a low-temperature solvent, and in fluorocarbon resins, especially tetrafluoroethylene.
Chromium	2014		< .02	Naturally occurring element; used in making steel and other alloys; used for chrome plating, dyes, and pigments, leather tanning and wood preservation.
Chromiun 6 (ppb)	2014		< .03	Naturally occuring element; used in making steel and other alloys; used for chrome plating, dyes and pigments, leather tanning, and wood preservation.
Cobalt	2014		< 1	Naturally occuring element found in the earth's crust and at low concentrations in seawater, and in some surface and ground water; cobaltous chloride was formerly used in medicine and as a germicide.
Molybdenum	2014		< 1	Naturally occuring element found in ores and present in plants, animals, and bacteria; commonly used form molybdenum trioxide used as a chemical reagent.
Perfluorobutanesulfonic acid (PFBS)	2014		< .09	Manmade chemical; used in products to make them stain, grease, heat and water resistant.
Perfluoroheptanoic acid (PFHpA)	2014		< .01	Manmade chemical; used in products to make them stain, grease, heat and water resistant.
Perfluorohexanesulfonic acid (PFHxS)	2014		< .03	Manmade chemical; used in products to make them stain, grease, heat and water resistant.
Perfluorononanoic acid (PFNA)	2014		< .02	Manmade chemical; used in products to make them stain, grease, heat and water resistant.
Perfluorooctanesulfonic acid (PFOS)	2014		< .04	Surfactant or emulsifier; used in fire-fighting foam, circuit board etching acids, alkaline cleaners, floor polish, and as a pesticide active ingredient for insect bait traps; U.S. manufacture of PFOS phased out in 2002; however, PFOS still generated incidentally.
Perfluorooctanoic acid (PFOA)	2014		< .02	Perfluorinated aliphatic carboxylic acid; used for its emulsifier and surfactant properties in or as fluoropolymers (such as Teflon), fire-fighting foams, cleaners, cosmetics, greases and lubricants, paints, polishes, adhesives and photographic films.
Strontium	2014	1844.827	431.689 - 3155.805	Naturally occuring element; historically, commercial use of strontium has been in the faceplate glass of cathode-ray tube televisions to block x-ray emissions.
Vanadium	2014		< .2	Naturally occuring elemental metal; used as vanadium pentoxide which is a chemical intermediate and a catalyst.

[1]Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. A maximum contaminant level (MCL) for these substances has not been established by either state or federal regulations, nor has mandatory health effects language.

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/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 (800) 426-4791.

Water Quality Test Results - Definitions

The tables on page 3 contain scientific terms and measures, some of which may require explanation.

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. MCLG's allow for a margin of safety.

AL: **Action Level:** The concentration of a contaminant which, if exceeded triggers treatment or other requirements which a water supply must comply.

ALG: **Action Level Goal:** The level of a contaminant in drinking water below which there is no known or expected risk to health. ALG's allow for a margin of safety.

Avg.: Regulatory compliance with some MCLs are based on running annual average of monthly samples.

MRDL: **Maximum Residual Disinfectant Level:** The highest level of disinfectant allowed in drinking water.

MRDLG: **Maximum Residual Disinfectant Level Goal:** The level of disinfectant in drinking water below which there is no known or expected risk to health. MRDLG's allow for a margin of safety.

ppm: Milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

ppb: Micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

N/A: Not applicable.

pCi/L: PicoCuries per liter, used to measure radioactivity.

2014 Water Quality Report

This report is intended to provide you with important information about your drinking water and the efforts made by the Lemont water system to provide safe drinking water. The source of drinking water used by Lemont is ground water. For more information regarding this report, contact Ralph Pukula, Director of Public Works, at (630) 257-2532.

Village of Lemont
Facility IL 0311620

This report is also available on line
at www.lemont.il.us/2014waterreport

* 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. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. 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 http://www.epa.gov/safewater/lead.

We want our valued customers to be informed about their water quality. The source water assessment for our supply has been completed by the Illinois EPA. If you would like a copy of this information, please call Ralph Pukula, Director of Public Works, at (630) 257-2532. To view a summary version of the completed Source Water Assessments, including: Importance of Source Water; Susceptibility to Contamination Determination; and documentation/recommendation of Source Water Protection Efforts, you may access the Illinois EPA website at http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl.

FEEDBACK - Lemont Water System

If you have any comments regarding the water system, let us know.

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Return to:
Department of Public Works
Village of Lemont
418 Main Street
Lemont, IL 60439

Please include your name and address if you would like a response.

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Board meetings:
2nd and 4th Mondays at 7:00 p.m.

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