

# 2015 Water Quality Report

Village of Lemont Facility IL 0311620

This report is also available on line at www.lemont.il.us/2015waterreport

## Annual Drinking Water Quality Report for Calendar Year 2015

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. This report includes drinking water facts, information on violations, and contaminants detected in your drinking water supply during calendar year 2015. Each year, we will provide you a new report. If you need help understanding this report or have general questions, please contact the person listed below.

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#### **Testing Requirements**

Once again we are proud to report that in the year 2015 the water quality in Lemont met all of the United States Environmental Protection Agency (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 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.

#### **Sources of Drinking Water**

Our source of water comes from Ground Water. 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.

Well Data for the Village of Lemont						
Well Description	Status	Location	Water Type			
Well 2	Α	Emergency Well	GW			
Well 3	Α	Bank of each side of State Street.	GW			
Well 4	Α	E Side of Houston S of Schultz	GW			
Well 5	Α	SW of Lemont IL	GW			
Well 6	Α	SW of Mt. Vernon Cemetery	GW			

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, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Possible contaminants consist of:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife;
- <u>Inorganic contaminants</u>, 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 may 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.

#### Other Facts about Drinking 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.

In order to ensure that tap water is safe to drink, USEPA prescribes regulations which 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.

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).

#### **Source Water Assessments**

We want our valued customers to be informed about their water quality. Our regularly scheduled Village Board Meetings are held at 7 p.m. the 2<sup>nd</sup> and 4<sup>th</sup> Monday's of each month should have questions or comments about our 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 the Public Works Department 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.

The IEPA 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 hydrogeological data on the wells.

Furthermore, in anticipation of the USEPA'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 hydrogeological 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 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 IEPA, 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 remediation which may be of concern.

Source water protection (SWP) is a proactive approach to protecting our critical sources of public water supply and assuring that the best source of water is being utilized to serve the public. It involves implementation of pollution prevention practices to protect the water quality in a watershed or wellhead protection area serving a public water supply. Along with treatment, it establishes a multi-barrier approach to assuring clean and safe drinking water to the citizens of Illinois. The Illinois EPA has implemented a source water assessment program (SWAP) to assist with wellhead and watershed protection of public drinking water supplies.

#### 2015 Water Quality Data - Regulated Contaminants Detected in 2015

The next several tables summarize contaminants detected in your drinking water supply.

Here are a few definitions and scientific terms which will help you understand the information in the contaminant detection tables.

AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.						
Avg	Regulatory compliance with some MCLs is based on running annual average of monthly samples.						
MCL	Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the Maximum Contaminant Level Goal 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 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. MRDLGs allow for a margin of safety.						
N/A	Not Applicable						
NTU	Nephelometric Turbidity Units						
pCi/L	picocuries per liter ( a measure of radioactivity)						
ppb	Parts per billion or micrograms per liter (ug/L) - or one ounce in 7,350,000 gallons of water.						
ppm	Parts per million or milligrams per liter (mg/L) - or one ounce in 7,350 gallons of water.						
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.						

Coliform Bacteria	MCLG	Total Coliform MCL	Highest Number of Positive Samples	Fecal Coliform or <i>E. coli</i> MCL	Total No. of Positive E. coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
	0	MCL: presence of coliform bacteria in > 5% of monthly samples (for systems that collect 40 or more samples/month).  > 1 positive monthly sample (for systems that collect < 40 samples/month).	0	Fecal Coliform or E. Coli MCL: A routine sample and a repeat sample are total coliform positive, and one is also fecal coliform or E. coli positive	0	N	Naturally present in the environment

Lead and Copper								
	Date Sampled	MCLG	Action Level	90 <sup>th</sup>	# Sites Over	Units	Violation	Likely Source of Contamination
			(AL)	Percentile	AL			
Copper	08/28/2014	1.3	1.3	0.12	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives;
СОРРСІ	00/20/2014	1.5	1.5	0.12	O	рріп	IV	Corrosion of household plumbing systems.
Lead	08/28/2014	0	15	2.8	0	nnh	N	Corrosion of household plumbing systems; Erosion of natural
Leau	00/20/2014	2014 0 15 2.8 0 ppb		IN	deposits.			

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. The Village of Lemont is responsible for providing high quality drinking water, but 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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

Disinfectants & Disinfection Byproducts	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	12/31/201 5	0.6	0.6 – 0.7	MRDLG =4	MRDL =4	ppm	N	Water additive used to control microbes.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	2015	1.7	0 – 1.7	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2015	0.03	0.0042 - 0.03	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2015	1.27	0 - 1.27	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Iron	2015	1.4	0.071 – 1.4		1.0	ppm	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Manganese	2015	25	1.5 – 25	150	150	ppb	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Sodium	2015	170	47 – 170			ppm	N	Erosion from naturally occurring deposits; Used in water softener regeneration.
Zinc	2015	0.015	0 – 0.015	5	5	ppm	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Naturally occurring; discharge from metal.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	2015	7	0 – 25.7	0	5	pCi/L	Υ	Erosion of natural deposits.
Gross alpha excluding radon and uranium	2015	13	0 - 39	0	15	pCi/L	N	Erosion of natural deposits.
Volatile Organic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Xylenes	2015	0.004	0 - 0	10	10	ppm	N	Discharge from petroleum factories; Discharge from chemical factories.

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.

Consumer Confidence Rule – The Consumer 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 Summary Table**

The following table lists all violations that occurred during 2015. We included a brief summary of the actions we took following notification of the violation.

Contaminant or Program	Violation Type	Violation Duration Start Date – End date	Violation Explanation				
Combined Radium 226/228	MCL, Average	01/01/2015 - 03/31/2015	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.				
	MCL, Average	04/01/2015 - 06/30/2015	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.				
	MCL, Average	07/01/2015 - 09/30/2015	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.				
	MCL, Average	10/01/2015 – 12/31/2015	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.				
	MCL, Single Sample	01/01/2015 - 03/31/2015	A water sample showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.				
Health Effects (if applicable)	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.						
Actions we took:	Since being notified of the initial problem, the Village immediately began working with the IEPA and water system consultants to evaluate the water supply and our softening procedures. We sent follow-up samples to an independent lab and have received results for each well that are well below IEPA acceptable standards.						
	We believe the issue to be resolved and we are continuing to research options to ensure the levels meet standards going forward.						