



Western Springs, IL 60558

708-246-1800 Fax 708-246-0284 www.wsprings.com Pre-sort
Carrier Route

Bulk Rate
U.S. Postage
PAID
Western Springs, Illinois
PERMIT NO. 34

## POSTAL CUSTOMER WESTERN SPRINGS, ILLINOIS 60558

#### **Water Treatment Chemicals**

Chemicals added to the water during 2013 include the following:

Chlorine (bleach) is added to the water for the purpose of disinfection. A free chlorine residual is used to inactivate pathogenic bacteria that may find their way into the distribution system and to help limit bacterial activity in the water. By taking chlorine residuals, the amount of this disinfecting agent is determined. Finished water leaving the plant carries a

chlorine residual of approximately 0.5—1.0 parts per million (ppm). As the water travels through the distribution system the residual dissipates and at the furthest end of the system it drops to approximately 0.2 ppm.

**Caustic (sodium hydroxide)** is used to raise the final pH of the finished water.

Corrosion Inhibitor (liquid phosphate) is used to lay down a thin, protective

film in the water main to control corrosion.

**Antiscalant** is used as a low pH conditioner to prevent premature fouling of the membranes.

Any questions may be directed to Ken Hayes, Water Plant Operator, at 708-246-1800, Ext. 215 or khayes@wsprings.com.



#### **Use of Outdoor Water**

This summer enjoy the use of water for outdoor purposes without any restrictions; however, please practice conservancy.

# VILLAGE OF WESTERN SPRINGS ANNUAL WATER QUALITY

REPORT

Water testing performed in 2013

## Water Bill Payment Made Easy

Automatic payment of your water bill is available to all residents. Your payment is electronically withdrawn from the account of your choice on the due date of your water bill.

Interested? The application is available at www.wsprings.com or the Village Hall.

For more information, please contact the Finance Department at 708-246-1800. Ext. 126.

#### **Continuing Our Commitment**

Once again the Village of Western Springs proudly presents the annual water quality report. This report covers all required testing through 2013 and is designed to inform you about the quality of the drinking water. The report includes details about where your water comes from and what it contains.

We are pleased to tell you that the Village of

Western Springs complied with all primary USEPA water regulations. As in the past, we are committed to delivering the a good quality drinking water.

In the Village of Western Springs, the governing body overseeing the water system is the Village Board. The Board meets on the second and fourth Mondays of each month.

There is also an advisory group of citizens, the Infrastructure Commission, who meet on an as-needed basis.

For more information about this report, or for any questions relating to your drinking water, please contact Ken Hayes, Water Plant Operator, at 708-246-1800, Ext. 215 or khayes@wsprings.com.

#### Inside this issue:

What's in my water?

Water Quality Test Results

Definitions

Were does my water come from?

Contaminants that might be found in drinking

Water Assessment Summary

Water Treatment Chemicals **Open House for Water Plant** 

In 2008, after years of study and analysis, the Village selected reverse osmosis (RO) as the preferred method of treating the water supply in the future. The project to reconstruct the water plant into reverse osmosis (RO) technology began in November 2011 with major construction completed in June 2013 and

final completion of the contract on April 30, 2014.

To celebrate the completion of the Village's largest capital project, the Village will be scheduling an Open House in August for residents to visit and learn about the new technology in the plant

Details for the Open House will be posted to www.wsprings.com.

Residents can receive an email or a text message regarding the Open House by subscribing to **Community News** through the **Notify Me** section of the web site.

## What's In My Water?

The Village is pleased to report that during 2013 the water delivered to your home or business met all primary USEPA drinking water requirements.

Water quality can and does vary during the course of the year due to operational considerations, seasonal demands and system repairs. Fluoride occurs naturally in the well water and currently is not added.

The Water Plant is a reverse osmosis (RO) system using pressure to force water

through a membrane, which produces a water 99% contaminant free. This contaminant–free water is blended with filtered aquifer water to produce a finished water.

#### Where Does My Water Come From?

Since the development of the Western Springs' water system in 1882, the Village has obtained its water from ground water sources. During the early years these included springs from which the community derives its name. In subsequent years, the Village became dependent upon well water and. since

the late 1950's, the primary water source has been deep wells.

At the present time, the Village has three wells, two deep and one shallow. Of the two deep wells, one draws water from the Galesville aquifer and the other draws water from both Galesville and Mt. Simon aquifers. These

aquifers are underground rivers passing through sandstone formations which extend north into Wisconsin. The shallow well draws water from the Niagaran aquifer, an underground river that passes through a limestone formation.

### **Water Quality Test Results\***

Regulated Contaminants	Sample Location	Collection Date(s)	Highest Level Detected	Range of Levels Detected	Unit of Measurement	MCLG Drinking	USEPA MCL Drinking	USEPA MCL Drinking	Likely Source of Contamination
				Detected			Primary	Violation	
<b>Disinfectant-monthly</b> Chlorine	Distribution	12/31/2012	1.2	0.2-1.2	ppm	MRDLG=4	MRDL=4	No	A water additive to
									control microbes
Nitrates & Nitrites year	•								
Nitrates (N03-N)	Finished–WTP	07/10/2013	ND	ND	ppm		10.0	No	Release from fertilizer
DBP's (TTHM)-yearly									
Total Trihalomethanes	Distribution	6/12/2013	ND	ND	ppb		80	No	Chlorine+organics
DBP's (HAA5)-yearly									
Bromoacetic acid	Distribution	6/12/2013	ND	ND	ppb				Chlorine+organics
Dibromoacetic acid	Distribution	6/12/2013	<u>ND</u>	ND	ppb				Chlorine+organics
Total Haloacetic acids	Distribution	6/12/2013	0.00		ppb		60	No	Chlorine+organics
Inorganics (IOC)-3 years									
Arsenic	Well #I	10/3/2012	2.52	2.52	ppb	0.0	10	No	Rock/soil erosion
Barium	Well #I	10/3/2012	0.0244	0.0244	ppm	2.0	2.0	No	Rock/soil erosion
Fluoride	Well #I	10/3/2012	0.199	0.199	ppm	4.0	4.0	No	Rock/soil erosion
Iron	Well #I	10/3/2012	1.83	1.83	ppm		1.0 (IL)	No	Rock/soil erosion
Manganese	Well #I	10/3/2012	140	140	ppb	150.0	150(IL)	No	Rock/soil erosion
Sodium	Well #I	10/3/2012	139	139	ppm			No	Rock/soil erosion
Lead & Copper-3 years						90th% MCLG	AL Over AL		
Copper	Distribution	7/14/2011			ppm	0.111 1.3	1.3 0	No	Homeowners plumbing
Lead	Distribution	7/14/2011			ppb	6.23 0	15 0	No	Homeowners plumbing
Organics(VOC)-3 years	Finished-WTP	1/10/2012	ND	ND	ppb			No	Manmade compounds
Organics(SOC)-3 years	Finished–WTP	1/10/2012	ND	ND	ppb			No	Manmade compounds
Organics(SOC)-3 years	Finished–WTP	4/25/2012	ND	ND	ррь			No	Manmade compounds
Radionuclides-6 years									
Alpha Emitters	Well #I	10/23/2013	8.80	8.80	pCi/L		15.0	No	Rock/soil erosion
Combined Radium (226&228)	Well #I	10/23/2013	0.56	0.56	pCi/L		5.0	No	Rock/soil erosion
Uranium	Finished-WTP	1/26/2009	.0.0894	0.0894	ррь		30.0	No	Rock/soil erosion

\*Table shows most recent data (2009-2013) from samples collected for IEPA

#### TABLE DEFINITIONS

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 o

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

of disinfectant in drinking water below which there is no known or expected risk to health.

TTHM—Total Trihalomethanes
VOC—Volitle Organic Chemicals
WTP—Water Treatment Plant
90th%—90th percentile

## **Contaminants That Might Be Found in Drinking Water**

Possible 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, 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;

**Pesticides and herbicides,** may come from a variety of sources such as 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 may be naturally occurring or be the result of oil and gas production.

Drinking water, including bottled water, may reasonably be expected to contain small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. In order to ensure that tap water is safe to drink, USEPA prescribes regulations, which limit the amount of certain substances in the water provided by the public water system. Federal Drug Administration regulations establish limits for contaminants in bottled water.

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.

If present, elevated levels of lead can cause serious health problems. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. 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.

More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (800-426-4791) or visiting www.epa.gov.

#### **2013 Source Water Assessment Summary**

The Source Water Assessment has been completed and the Illinois EPA has determined that "Western Springs' wells #3 and #4 source water is not susceptible 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 hydro-geological data on the well."

To view a summary version of the completed Source Water Assessment, including: Importance of Source Water; Susceptibility to Contamination Determination; and documentation/recommendation of Source Water Protection Efforts, you may access the Illinois EPA web site at www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl.

contaminant that is allowed in drinking water. MCLs are set as close to the MCLG as feasible using the best available treatment technology.

MCLG (Maximum Contaminant Level Goal) The level of a

MCLG (Maximum Contaminant Level Goal) The level of a

MD—Not detected pCi/L (picocuries per liter) A measure of radioactivity.

MCLG (Maximum Contaminant Level Goal) The level of a

**SOC**—Synthetic Organic Chemicals

ppb (parts per billion) One part substance per billion parts water.

ppm (parts per million) One part substance per million parts water.

#### Page 2

IL—Illinois

AL—Action level

HAA—Haloacetic Acids

IOC—Inorganic Chemicals

**DBP's**—Disinfection By Products

MCL (Maximum Contaminant Level) The highest level of a