# **CONSUMER CONFIDENCE REPORT Public Water Supply**

Facility ID: IL0310210

For The Monitoring Year 2013



## THE CITY OF BERWYN, ILLINOIS

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## ROBERT J. LOVERO MAYOR

ROBERT SCHILLER Director of Public Works One Public Works Drive Berwyn, Illinois 60402 The City of Berwyn, in compliance with the Safe Drinking Water Act (SDWA), is issuing the Consumer Confidence Report (CCR) for the monitoring period of January 1 through December 31, 2013. The City of Berwyn, in cooperation with the City of Chicago and Illinois Environmental Protection Agency (IEPA) are providing this report to you with important information concerning the quality and source of your drinking water. During 2013, the City of Berwyn has provided water that meets all the requirements of the United States Environmental Protection Agency (USEPA) and the Illinois Environmental Protection Agency (IEPA) drinking water standards.

The City of Berwyn continues to maintain and improve their water system. Through our diligent monitoring of the water distribution system we are commented to providing you with the safest and most reliable water source. Consumers with medical conditions may use the water quality analysis provided, or request a City of Chicago complete water analysis, to consult with their family doctors. Others may learn ways to better protect their children from the effects of lead in our environment, or how to conserve water in our daily lives. We strongly encourage our customers to become a partner with the City of Berwyn in providing the very best in clean and safe water.

If you would like to learn more please contact or stop by City Hall or visit our web site at <a href="http://www.berwyn-il.gov/">http://www.berwyn-il.gov/</a>. There you will find the completed IPEA Source Water Assessments; including current City water infrastructure projects and see our regularly scheduled meetings dates and times. To access other information regarding Source Water; Susceptibility of Contamination Determination, and documentation / recommendations of Source Water Protection Efforts, you may also want to visit the Illinois EPA at:

http://www/.pa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl.

If there are any questions, or if additional information is needed, please contact Robert Schiller, Director of Public Works, at (708) 749-4700.

Sincerely,

CITY OF BERWYN

Robert Schiller

Robert Schiller, Director of Public Works

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## SECTION I. ABOUT YOUR WATER SUPPLY

## **Water Supply:**

In 2013 all of the approximately 1.8 Billion gallons of water the City of Berwyn distributed came from Lake Michigan. Lake Michigan water is drawn from far offshore structures (known as Cribs) along the bottom of the Lake and treated at the City of Chicago Jardine Water Purification Plant (north of Navy Pier). This water is pumped through large transmission lines to the near Chicago suburbs where it is collected and redistributed. Berwyn purchases this water directly from the City of Chicago through two separate connections along Roosevelt Road. From there Berwyn brings this water to one of two reservoir pumping stations either on 19<sup>th</sup> Street or 30th Street facilities. Then it is distributed through the City's water main grid system of nearly 95 miles of pipe to the local and retail customer base.

## Water Quality:

The Illinois EPA considers all surface water sources of community water supply to be susceptible to potential pollution problems. The very nature of surface water allows contaminants to migrate into the intake with no protection only dilution. This is the reason for mandatory treatment for all surface water supplies in Illinois. Chicago's offshore intakes are located at a distance that shoreline impacts are not usually considered a factor on water quality. At certain times of the year, however, the potential for contamination exists due to wet-weather flows and river reversals. In addition, the placement of the crib structures may serve to attract waterfowl, gulls and terns that frequent the Great Lakes area, thereby concentrating fecal deposits at the intake and thus compromising the source water quality. Conversely, the shore intakes are highly susceptible to storm water runoff, marinas and shoreline point sources due to the influx of groundwater to the lake. Throughout history, there have been extraordinary steps taken to assure a safe source of drinking water in the Chicagoland area, from the building of the offshore cribs and the introduction of interceptor sewers to the lock-anddam system of Chicago's waterways and the City's Lakefront Zoning Ordinance. The City now looks to the recently created Department of the Water Management, Department of Environment and the MWRDGC to assure the safety of the City's water supply. Also, water supply officials from Chicago are active members of the West Shore Water Producers Association. Coordination of water quality situations (i.e., spills, tanker leaks, exotic species, etc.) and general lake conditions are frequently discussed during the association's quarterly meetings. Also, Lake Michigan has a variety of organizations and associations that are currently working to either maintain or improve water quality.

Finally, one of the best ways to ensure a safe source of drinking water is to develop a program designed to protect the source water against potential contamination on the local level. Since the predominant land use within Illinois' boundary of Lake Michigan watershed is urban, a majority of the watershed protection activities in this document are aimed at this purpose. Citizens should be aware that everyday activities in an urban setting might have a negative impact on their source water. Efforts should be made to improve awareness of storm water drains and their direct link to the lake within the identified local source water area. A proven best management practice (BMP) for this purpose has been the identification and stenciling of storm water drains within a watershed. Stenciling along with an educational component is necessary to keep the lake a safe and reliable source of drinking water.

## SECTION II. CONSUMER EDUCATION

## **City Testing:**

The City of Berwyn tests the water supply for chlorine content on a daily basis to maintain the optimum levels for the consumers' needs. On a monthly basis, sixty (60) bacteriological samples are taken. On a quarterly basis, samples are submitted for Total Trihalomethane (TTHM) Analysis. Samples are also provided for lead and copper monitoring on a schedule established by the IEPA. All testing and reports are performed according to the requirements of IEPA. A copy of the IEPA Water Quality Report for the City of Berwyn and City of Chicago is included later in this report.

## **Source of Drinking Water Contamination**

The sources of drinking water (both tap water and bottles 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 pickup 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 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 users.

**ORGANIC CHEMICAL CONTAMINANTS**, including synthetic and volatile organic chemicals, which are by-products of industrial process 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, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

## **Lawn Care Recommendations**

The City of Berwyn recommends to water deeply and infrequently. One inch of water per week is ideal and over-watering wastes your money. Over-watering removes plant nutrients from the soil and can cause disease problems in your lawn.

## SECTION II. CONSUMER EDUCATION (CONTINUED)

- 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 (1-800-426-4791).
- In order to ensure tap water is safe to drink, the EPA 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 (1-800-426-4791).
- 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 City of Berwyn 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 (1-800-426-4791) or at http://www.epa.gov/safewater/lead.
- The City of Berwyn follows the water conservation recommendations of the IEPA on sprinkling restrictions. The City restricts sprinkling to the hours between 5:00 am to 9:00 am and 7:00 p.m. to 10:00 p.m. during the period of May 15 to September 15.

## **Additional Information:**

For more information, contact the Water Department Superintendent of the City of Berwyn at (708) 749-4700. The City Council also meets on the second and fourth Tuesday of every month at 8:00 p.m. in the Council Room at the City Hall. These meetings are open to the public.

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

## **SECTION III. ABOUT THE DATA**

#### **TURBIDITY**

Turbidity is a measure of the cloudiness of water. We monitor it because it is a good indicator of water quality and the effectiveness of the filtration system and disinfectants.

#### **ASBESTOS**

Chicago examines samples for asbestos fibers on a routine bases. The EPA has determined that asbestos fibers greater than 10 microns in length could potentially cause lung cancer. They have not found fibers that are in this size category.

#### **FLUORIDE**

Fluoride is added to the water supply to help promote strong teeth. The Illinois Department of Public Health recommends an optimal fluoride range of 0.9mg/l to 1.2mg/l.

#### **SODIUM**

There is not a state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you should consult a physician about this level of sodium in the water.

#### **LEAD**

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. Chicago Department of Water Management is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When you 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 consumption.

If you are concerned about lead in your water, you may wish to have it tested. Information on lead in drinking water and steps to take to minimize exposure is available from the Safe Drinking Water Hotline or at: http://www.epa.gov/safewater/lead.

#### UNREGULATED CONTAMINANTS

A maximum contaminant level (MCL) for this contaminant has not been established by either state of federal regulations, nor has mandatory health effects language. The purpose for monitoring this contaminant is to assist USEPA in determining the occurrence of unregulated contaminants in drinking water, and weather future regulation is warranted.

Unregulated Contaminants	MCLG	MCL	Highest Level	Range of Detection
Chromium  Discharge from steel and pulp mills; erosion of natural deposits	N/A	N/A	0.5	0.4 — 0.5
Chromium-6 Discharge from steel and pulp mills; erosion of natural deposits	N/A	N/A	0.22	0.17 — 0.22
Molybdenum  Naturally Occurring; Discharge from factories	N/A	N/A	1.1	1.0 — 1.1
Strontium Naturally Occurring	N/A	N/A	128.9	112.2 — 128.9
Vanadium Naturally Occurring;	N/A	N/A	0.3	0.2 — 0.3

## SECTION IV. Regulated Contaminants Detected in 2013 (Collected in 2013 unless noted)

Microbial Contaminants	Total Coliform Maximum Contaminant Goal		otal Coliform Maximum taminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level		Total No. of Positive E. Coli or Fecal Coliform Samples		ecal Coliform Municipality		n Likely Source of Contaminants	
Total Coliform	0		% of Monthly Samples are positive.	0.6				0		N	Number of positive samples	
Bacteria	0	5% of Monthly Samples are positive.		1.6	_		0		Berwyn	N	per month. Naturally present in the environment.	
Lead and	Copper	MCLG	Action Leve (AL)	90th Perc	entile	# Sites Over		Municipality	Violation	Collection Date	Likely Source of Contaminants	
		0	15	6.6		1	ppb Chicago		N	08/23/2012	Corrosion of household	
Lea	ad	0	15	23.7	•	6	ppb	Berwyn	N	09/29/2011	plumbing systems; Erosion of natural deposits.	
			1.3	0.04	6	0	ppm	Chicago	N	08/23/2012	Corrosion of household plumbing sys-	
Сор	per	1.3	1.3	<0.10	0	0	ppm	Berwyn	N	12/31/2011	tems; Leaching from wood preserva- tives; Erosion of natural	
											deposits.	
Regulated Dis		MCL	G MCL	Highest Detect		Range of Levels Detected	Units	Municipality	Violation	Collection Date	Likely Source of Contaminants	
	MRDLG = 4 MRDL =		= 4 1		1 — 1	ppm	Chicago	N	12/31/2013			
Chlo	rine	MRDLG	6 = 4 MRDL :	4 1		1 — 1	ppm	ppm Berwyn	N	12/31/2013	Water additive used to control microbe	
Haloacetic Acids (HAA5)		No Go	oal 60	11		0 — 17.6	ppb	Chicago	N			
		No Go	oal 60	16		7.39 — 12.89	ppb	Berwyn	N		By-Product of drinking water disinfection	
Total Trihale	omethanes	No Go		22		9.7 — 34.8	ppb	Chicago	N			
(TTF		No Go	oal 80	34		14.14 — 42.3	ppb	Berwyn	N		By-Product of drinking water disinfection	
				1								

Inorganic Contaminants	MCLG	MCL	Highest Level Detected	Range of Levels Detected	Units	Municipality	Violation	Collection Date	Likely Source of Contaminants
Arsenic	0	10	1	0.519 — 0.767	ppb	Chicago	N		Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2	2	0.0205	0.0204 — 0.0205	ppm	Chicago	N		Discharge of drilling wastes; Discharge from refineries; Erosion of natural deposits.
Fluoride	4	4.0	0.9	0.856 — 0.922	ppm	Chicago	N		Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate (As N)	10	10	0.362	0.351 — 0.362	ppm	Chicago	N		Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Selenium	50	50	2	0 — 2.48	ppb	Chicago	N		Runoff from fertilizer use; leaching from septic tanks, sewage; Erosion of natural deposits.
Sodium	N/A	N/A	8	7.42 — 7.84	ppm	Chicago	N		Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Sulfate	N/A	N/A	11.9	ND — 11.9	PPM	Chicago	N		Erosion of naturally occurring deposits.

Radio Active & Synthetic Organic	MCLG	MCL	Highest Level Detected	Range of Levels Detected	Units	Municipality	Violation	Collection Date	Likely Source of Contaminants
Combined Radium 226/228	0	5	1.38	1.3 — 1.38	pCi/L	Chicago	N	03/17/2008	Erosion of natural deposits.
Gross alpha excluding radon and uranium	0	15	0.88	0.09 — 0.88	pCi/L	Chicago	N	03/17/2008	Erosion of natural deposits.

Turbidity	Limit (Treatment Techn	nique) Level Detected	Municipality	Violation	Likely Source of Contaminants
Highest Single Me urement %	eas- 1 NTU	0.18 NTU	Chicago	N	Soil Runoff.
Lowest Monthly meeting Limit	0.3 NIII	100%	Chicago	N	Soil Runoff.

## SECTION V. DEFINITION OF TERMS

## Maximum Contaminant Level Goal (MCLG)

The level of contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

## **Maximum Contaminant Level (MCL)**

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.

### Maximum Residual Disinfectant Level (MRDL)

The highest level of disinfectant allowed in drinking water.

## Maximum Residual Disinfectant Level Goal (MRDLG)

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.

#### Level Found

This column represents an average of sample result data collected during the CCR calendar year. In some cases, it may represent a single sample if only one sample was collected.

## Range of Detection

This column represents a range of individual sample results, from lowest to highest that were collected during the CCR calendar year.

#### Collection Date

If a date appears in this column, the Illinois EPA requires monitoring for this contaminant less than once per year because the concentrations do not frequently change. If no date appears in the column, monitoring for this contaminant was conducted during the CCR calendar year.

### Action Level (AL)

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

## Treatment Technique (TT)

A required process intended to reduce the level of a contaminant in drinking water.

#### Milligrams Per Liter or Parts Per Million (mg/l or ppm)

Unit of measurement of concentration in 7,350 gallons of water.

## Micrograms Per Liter or Parts Per Billion (ug/l or ppb)

Unit of measurement of concentration in 7,350,000 gallons of water.

#### AVG

Regulatory compliance with some MCL's are based on running annual average of monthly samples.

## **SECTION VI. 2013 Violation Table**

## 2013 Violation Summary Table City of Chicago

**Rule or Contaminant: None** 

Duration: N/A

Violation: No Violations for the Monitoring Year of 2013

Health Effects: N/A

## 2013 Violation Summary Table City of Berwyn

**Rule: Consumer Confidence Rule** 

Duration: 07/01/2013 — 08/02/2013

#### What happened?

Failure to provide to you, our drinking water customers, the annual report that informs you about the quality of our drinking water and characterizes the risks from exposure to contaminants detected in our drinking water within the designated time period.

Health Effects: There are no health effects at this time.

What should I do? There is nothing you need to do at this time.

#### What does this mean?

This is not an emergency. If it had been, you would have been notified immediately. 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.

## What is being done?

The City of Berwyn has improved their Distribution procedures.

#### 2013 Violation Summary Table City of Berwyn

Rule: Public Notification Rule

Duration: 11/16/2012 — 11/29/2013

#### What happened?

Failure to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations.

Health Effects: There are no health effects at this time.

What should I do? There is nothing you need to do at this time.

#### What does this mean?

This is not an emergency. If it had been, you would have been notified immediately. The Public Notification Rule helps to ensure that customers will always know if there is a problem with their drinking water. These notices immediately alert consumers if there is a serious problem with their drinking water (e.g., a boil water emergency).

#### What is being done?

The City of Berwyn has improved their Public Notification procedures

For more information about these violations:

Please contact Robert Schiller at (708) 749-4700 or the City of Berwyn 6700 26th Street Berwyn, Illinois 60402.