



CITY OF BERWYN

ILLINOIS

2014 Consumer Confidence Report
Public Water Supply Facility ID: IL0310210
Robert J Lovero, Mayor

May 2015

Dear Berwyn Water Customer;

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, 2014. The City of Berwyn, in conjunction with the City of Chicago and Illinois Environmental Protection Agency (Illinois EPA) are issuing this report to you with important information concerning the quality and source of your drinking water. During 2014, the City of Berwyn has provided water that meets all the requirements of the United States Environmental Protection Agency (USEPA) and the Illinois EPA drinking water standards and we are proud to announce that the City had no violations during the 2014 reporting period.

The City of Berwyn continues to maintain and improve their water system. Through our yearly infrastructure improvements to the diligent monitoring of the water distribution system we are committed 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 City Hall or visit our web site at <http://www.berwyn-il.gov/>. There you will find the completed Illinois EPA 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.epa.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

Source of Water Supply:

In 2014 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 19th 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.

Source Water Assessment:

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.

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>.

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-and-dam 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 Metropolitan Water Reclamation District of Greater Chicago (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

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.

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 EPAs Safe Drinking Water Hotline at (800) 426-4791.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The Federal Drug Administration (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. The EPA and the Center of Disease Control and Prevention (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).

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 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 <http://www.epa.gov/safewater/lead>.

Source of Drinking Water Contamination

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. Contaminants that may be present in source water 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.

SECTION III. ABOUT THE DATA

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 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 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 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>.

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.

SECTION IV. Regulated Contaminants Table

<u>Regulated Disinfectants & Disinfection By-Products</u>	MCLG	MCL	Highest Level Detected	Range of Levels Detected	Units	Municipality	Violation	Collection Date	Likely Source of Contaminants
Chlorine	MRDLG = 4	MRDL = 4	1	1 -- 1	ppm	Chicago	N	12/31/2014	Water additive used to control microbes.
	MRDLG = 4	MRDL = 4	1	0.9 -- 1.4	ppm	Berwyn	N	12/31/2014	
Haloacetic Acids (HAA5)	No Goal	60	11	2.6 — 14.6	ppb	Chicago	N	2014	By-Product of drinking water disinfection
	No Goal	60	9	8.6 — 8.6	ppb	Berwyn	N	2014	
Total Trihalomethanes (TTHM)	No Goal	80	22	9.4 — 31.1	ppb	Chicago	N	2014	
	No Goal	80	31	30.6 — 30.6	ppb	Berwyn	N	2014	
<u>Inorganic Contaminants</u>									
Arsenic	0	10	1	0.519 — 0.767	ppb	Chicago	N	2013	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2	2	0.0227	0.0223 — 0.0227	ppm	Chicago	N	2014	Discharge of drilling wastes; Discharge from refineries; Erosion of natural deposits.
Fluoride	4	4.0	1	0.941 — 0.977	ppm	Chicago	N	2014	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate (Measured as Nitrogen)	10	10	0.308	0.304 — 0.308	ppm	Chicago	N	2014	Runoff from fertilizer use; leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	50	50	2	0 — 2.48	ppb	Chicago	N	2013	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
<u>Radio Active & Synthetic Organic Contaminants</u>									
Combined Radium 226/228	0	5	0.84	0.5 — 0.84	pCi/L	Chicago	N	2014	Erosion of natural deposits.
Gross alpha excluding radon and uranium	0	15	6.6	6.1 — 6.6	pCi/L	Chicago	N	2014	Erosion of natural deposits.

SECTION IV. Regulated Contaminants Table Continued (Collected in 2014 unless noted)

<u>Microbial Contaminants</u>	Total Coliform Maximum Contaminant Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Municipality	Violation	Likely Source of Contaminants
Total Coliform Bacteria	0	5% of Monthly Samples are positive.	0.6		0	Chicago	N	Naturally present in the environment.

Turbidity	Limit (Treatment Technique)	Level Detected	Municipality	Violation	Likely Source of Contaminants
Highest Single Measurement %	1 NTU	0.11 NTU	Chicago	N	Soil Runoff.
Lowest Monthly % meeting Limit	0.3 NTU	100%	Chicago	N	Soil Runoff.

<u>Lead and Copper</u>	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Municipality	Violation	Collection Date	Likely Source of Contaminants
Lead	0	15	6.6	1	ppb	Chicago	N	08/23/2012	Corrosion of household plumbing systems; Erosion of natural deposits.
	0	15	21.6	7	ppb	Berwyn	N	2014	
Copper	1.3	1.3	0.046	0	ppm	Chicago	N	08/23/2012	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
	1.3	1.3	0.10	0	ppm	Berwyn	N	12/31/2011	

SECTION IV. Violation Table

2014 Violation Summary Table City of Berwyn
Rule or Contaminant: None
Duration: N/A
Violation: No Violations for the Monitoring Year of 2014
Health Effects: N/A

SECTION V. Unregulated Contaminants Table

UNREGULATED CONTAMINANTS

A maximum contaminant level (MCL) for this contaminant has not been established by either state or 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 whether future regulation is warranted.

UCMR3 COMPLIANCE

In compliance with the Unregulated Contaminant Monitoring Rule 3 (UCMR3) as required by the EPA, the City of Chicago has monitored for 28 contaminants suspected to be present in drinking water, but that do not have health-based standards set under the Safe Drinking Water Act (SDWA). The monitoring results were reported to the EPA. The list of UCMR3 contaminants that we have monitored include volatile organic chemicals, metals, perfluorinated compounds, hormones, 1,4-dioxane and chlorate. The contaminants that were detected in this monitoring program are listed below.

<u>Unregulated Contaminants</u>	MCLG	MCL	Highest Level Detected	Range of Levels Detected	Units	Municipality	Violation	Collection Date	Likely Source of Contaminants
Sulfate	N/A	N/A	35.5	20.9 — 35.5	ppm	Chicago	N	2014	Erosion from naturally occurring deposits.
Sodium	N/A	N/A	10	9.5 — 10	ppm	Chicago	N	2014	Erosion from naturally occurring deposits; Used on water softener regeneration.
<u>UCMR3 Compliance</u>									
Chromium	100	100	0.3	0.2 — 0.3	ppb	Chicago	N	2014	Naturally occurring element; used in making steel and other alloys
Molybdenum	N/A	N/A	1.1	1.0 — 1.1	ppb	Chicago	N	2014	Naturally occurring element found in ores and present in plants animals and bacteria; commonly used form molybdenum trioxide
Strontium	N/A	N/A	120	110 — 120	ppb	Chicago	N	2014	Naturally occurring element; has been used in cathode-ray tube TVs to block x-ray emissions
Vanadium	N/A	N/A	0.3	ND — 0.3	ppb	Chicago	N	2014	Naturally occurring metal; vanadium pentoxide is used a catalyst
Chromium—6	N/A	N/A	0.22	0.18 — 0.22	ppb	Chicago	N	2014	Naturally occurring element; used in
4-Androstene	N/A	N/A	0.0008	0.0006 — 0.0008	ppb	Chicago	N	2014	Steroidal hormone naturally produced in the human body; and used as an anabolic steroid and dietary supplement
Testosterone	N/A	N/A	0.0001	0.0001 — 0.0001	ppb	Chicago	N	2014	Androgenic steroid naturally produced in the human body; and used in pharmaceuticals

Contact Us

for more information concerning the 2014 Consumer Confidence Report.

City of Berwyn

One Public Works Drive
Berwyn, Illinois 60402

Water Department
(708) 749-4700 or at www.berwyn-il.gov

Illinois EPA

1021 N. Grand Ave. East
P.O. Box 19276
Springfield, IL 62794
(217) 782-3397 or at www.epa.illinois.gov/

For 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. . Also, you can contact USEPA's Safe Drinking Water Hotline at: (1-800-426-4791).

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

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.

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.