

2016 WATER QUALITY REPORT

WEST DUNDEE - IL0890950

Annual Water Quality Report for the period of January 1 to December 31, 2016

This report is intended to provide you with important information about your drinking water and the efforts made by the WEST DUNDEE water system to provide safe drinking water. The source of drinking water used by WEST DUNDEE is Ground Water.

For more information regarding this report contact:
Patrick Doyle, Water Superintendent; Phone 847-586-5577

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

A paper copy of this report as well as a copy of the "Source Water Assessment" are available for pickup at:

Village Hall, 102 South Second Street
Public Works Facility, 900 Angle Tarn
Online at www.wdundee.org/?page=reports

Opportunities for public participation in decisions that may affect the quality of the water can be addressed at any regularly scheduled Village Board Meeting, held on the first and third Mondays of every month unless otherwise noted. Meeting dates and agendas are available online at www.wdundee.org.

Source of Drinking Water - Potential Contaminants

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 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.

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

In order to ensure that tap water is safe to drink, the USEPA and Illinois 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 (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 are responsible for providing high quality drinking water, but 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 www.epa.gov/safewater/lead.

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 livestock 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 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.

Source Water Assessment

We want our valued customers to be informed about their water quality. If you would like to learn more, please feel welcome to attend any of our regularly scheduled meetings. The source water assessment for our supply has been completed by the Illinois EPA. If you would like a copy of this information, please stop by Village Hall or call our Water Superintendent at Department of Public Works **847-551-3815**. 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>.

Based on information obtained in a Well Site Survey published in January 1990 by the Illinois EPA, twenty-five potential sources or possible problem sites were identified within the survey area of West Dundee'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. The Illinois EPA has determined that West Dundee's Wells #1 and #5 source water are 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 hydrogeologic data on the wells.

Source Water Information

Source Water Name	Type of Water	Report Status	Location
Well 1 (20113)	GW	Active	Dunning Ave at Second Street
Well 5 (01067)	GW	Active	NW Corner of WTP Site (Public Works Complex)
Well 6 (01611)	GW	Active	2500 Ft S of Binnie Rd and Randall

Water Quality Test Result Definitions

The following tables contain scientific terms and measures, some of which may require explanation.

- 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.
- 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.
- MRDLG:** *Maximum Residual Disinfectant Level Goal* - The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- MRDL:** *Maximum Residual Disinfectant Level* - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- Avg:** *Average* - Regulatory compliance with some MCLs are based on running annual average of monthly samples.
- pCi/L:** *Picocuries per liter*.
- ppb:** *Micrograms per liter or parts per billion* - one ounce in 7,350,000 gallons of water.
- ppm:** *Milligrams per liter or parts per million* - one ounce in 7,350 gallons of water.
- ALG:** *Action Level Goal* - The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs 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 system must follow.

2016 Regulated Contaminants

Lead & Copper	Date Sampled	MCLG	Action Level	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	Triennial July-Aug 2015	1.3	1.3	0.156	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	Triennial July-Aug 2015	0	15	3.8	1	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

IEPA requires monitoring of certain contaminants less than once per year because the concentration of these contaminants do not change frequently.

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	12/31/16	2	1.6-2	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5) *	3/3/16 9/13/16	36.2	25-36.2	No goal for the total	60	ppb	N	By-product of drinking water chlorination.
Total Trihalomethanes (TTHm)*	Triennial 2016	72.1	43.5-72.1	No goal for the total	80	ppb	N	By-product of drinking water chlorination.

Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	7/14/16	1.6	1.3-1.6	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	4/14/15	1.14	1.14-1.14	4	4	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Iron	4/14/15	0.013	0.013-0.013		1.0	ppm	N	Not currently regulated by the USEPA, however, the state regulates. Erosion of natural deposits.
Sodium	4/14/15	130	130-130			ppm	N	Erosion from naturally occurring deposits: Used in water softener regeneration.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	7/28/16	3.05	1.748-3.05	0	5	pCi/L	N	Erosion of natural deposits.