Annual Drinking Water Quality Report

For the period of January 1 to December 31, 2015

CORTLAND

IL0370051

This report is intended to provide you with important information about your drinking water and the efforts made by the Town of Cortland Water Department staff to provide safe drinking water. We are pleased to inform you that the Town of Cortland's drinking water meets or exceeds all Federal and State drinking water standards. The source of drinking water used by the Town of Cortland is Ground Water.
We want our valued customers to be informed about their water quality and participate in decisions that may affect the quality of your water; please feel free to attend any of the board meetings at Town Hall which are held at 7PM on the second and fourth Monday's of the month. The Town of Cortland Water Department has received the Illinois Department of Public Health certificate of commendation for achieving the highest standard of compliance in accordance with the Illinois Fluoridation Act every year since 2008.

For more information regarding this report, contact:

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

Source of Drinking Water

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.

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.

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. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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 and 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.

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. USEPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the USEPA's Safe Drinking Water Hotline (800-426-4791).

Source Water Assessment

The Town of Cortland (Facility #0370051) has four public water supply wells which produced approximately 242,784 gallons per day to an estimated population of 4,270 through 1,435 service connections in 2015.

The Illinois EPA has determined that the Cortland Community Water Supply's 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 available hydrogeologic data on the wells.

Furthermore, in anticipation of the USEPA's proposed Ground Water Rule, the Illinois EPA has determined that the Cortland Community Water Supply is not vulnerable to viral contamination. This determination is based upon the evaluation of the following criteria during the Vulnerability Waiver Process: the community's wells are properly constructed with sound integrity and proper siting conditions; a hydrogeologic barrier exists which should prevent pathogen movement; all potential routes and sanitary defects have been mitigated such that the source water is adequately protected; monitoring data 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 this determination. Hence, well hydraulics were not evaluated for this system ground water supply. The Illinois Environmental Protection Act provides minimum protection zones of 200 feet for your wells. These minimum protection zones are regulated by the Illinois EPA. To further reduce the risk to source water, the water supply has implemented a wellhead protection program which includes the proper abandonment of potential routes of groundwater contamination and correction of sanitary defects at the water treatment facility. This effort resulted in the community water supply receiving a special exception permit from the Illinois EPA which allows a reduction in monitoring. The outcome of this monitoring reduction has saved the community considerable laboratory analysis costs.

To further minimize the risk to the community's groundwater supply, the Illinois EPA recommends that three additional activities be assessed. First the community may wish to enact a "maximum setback zone" ordinance. These ordinances are authorized by the Illinois Environmental Protection Act and allow county and municipal officials the opportunity to provide additional protection up to a fixed distance, normally 1,000 feet, from their wells. (Based on information obtained in a Well Site Survey published in 1991 by the Illinois EPA, several secondary sources are located within 1,000 feet of the wells.) Second, the water supply staff has developed a contingency plan for emergency preparedness and will review it annually. Contingency planning documents are a primary means to ensure that, through emergency preparedness, a community will minimize their risk of being without safe and adequate water. Finally, the water supply staff continuously reviews and updates their cross connection control program to ensure that it remains current and viable. Cross connections to either the water treatment plant (for example, at bulk water loading stations) or in the distribution system may negate all source water protection initiatives provided by the community.

2015 Regulated Contaminants Detected

Lead and Copper

Date Sampled: 2015

Definitions: **Action Level (AL)** - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. **Action Level Goal (ALG)** - The level of a contaminant in drinking water below which there is no known or expected risk to health. ALG's allow for a margin of safety.

Lead MCLG	Lead Action Level (AL)	Lead 90th Percentile	# Sites Over Lead AL	Copper MCLG	Copper Action Level (AL)	Copper 90th Percentile	Violation	Likely Source of Contamination
				1.3ppm	1.3ppm	0.251ppm	NO	Corrosion of household plumbing systems, Erosion of natural deposits, leaching from wood preservatives
0	15 ppb	2.7ppb	0				NO	Corrosion of household plumbing systems; Erosion of natural deposits

Definitions: The following tables contain scientific terms and measures, some of which may require explanation. **Maximum Contaminant Level (MCL)** - The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the Maximum Contaminant Level Goal as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) - The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety. **mg/l** - milligrams per litre or **ppm** - parts per million or one ounce in 7,350 gallons of water**. ug/l** - micrograms per litre or **ppb** - parts per billion or one ounce in 7,350,000 gallons of water. **pCil –** picocuries per liter, a measure of radioactivity. **mrem/year** – millirems per year, a measure of radiation absorbed by the body. **na** - not applicable. **Avg** - Regulatory compliance with some MCLs are based on running annual average of monthly samples. **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.

Disinfectants & Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant
Chlorine	12-31-2015	0.6	0.3-2.4	MRDLG=4	MRDL=4	ppm	NO	Water additive used to control microbes
Total Trihalomethanes (TTHM)	2015	3	2.58-2.58	No Goal For The Total	80	ppb	NO	By-product of drinking water disinfection

Regulated Contaminants

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant
Barium	2015	0.71	0.11-0.71	2	2	ppm	NO	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride	2015	1.15	1.13-1.15	4	4.0	ppm	NO	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Radioactive Contaminants	**Collection Date**	**Highest Level Detected**	**Range of Levels Detected**	**MCLG**	**MCL**	**Units**	**Violation**	**Likely Source Of Contaminant**
Combined Radium 226/228	2015	4	0.876-3.61	0	5	pCi/L	NO	Erosion of natural deposits
Gross Alpha excluding Radon and Uranium	2015	10	5.28-9.57	0	15	pCi/L	NO	Erosion of natural deposits
State Regulated Contaminants	**Collection Date**	**Highest Level Detected**	**Range of Levels Detected**	**MCLG**	**MCL**	**Units**	**Violation**	**Likely Source Of Contaminant**
Iron This contaminant is not currently regulated by USEPA. However, the state has set an MCL for this contaminant for supplies serving a population of 1000 or more.	2015	0..2	0.095-0.2		1	ppm	NO	Erosion from naturally occurring deposits
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.	2015	270	17-270			ppm	NO	Erosion of naturally occurring deposits; used in water softener regeneration
Nitrate (Measured As Nitrogen)	2015	0.41	0-0.41	10	10	ppm	NO	Runoff from fertilizer use: Leaching septic tanks, sewage: Erosion of natural deposits.
Manganese This contaminant is not currently regulated by the USEPA. However, the state regulates.	2015	7.6	2-7.6	150	150	ppb	NO	Erosion of natural deposits.
Zinc This contaminant is not currently regulated by the USEPA. However, the state regulates	2015	0.011	0-0.011	5	5	ppm	NO	Naturally occurring: discharge from metal.

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. 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.

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Town of Cortland Public Water System Users
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2015 Annual Drinking Water Quality Report
For Users of the Public Water System
In the Town of Cortland