2014 WATER QUALITY REPORT

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Printed May 2015

WATER QUALITY - 2014

The Water Division is committed to providing our customers with the best water possible, which is safe to drink and aesthetically pleasing. In 2011, as in previous years, your drinking water was tested in accordance to health standards set by regulatory agencies. Those agencies are both the United States and Illinois Environmental Protection Agency, USEPA and IEPA respectively.

As our customer, we would like you to fully understand the efforts we make to provide safe water. It is our belief that an informed customer is our best ally. This report summarizes the quality of water that we provided in 2011, including details about where your water comes from, what it contains, and how it compares to Federal and State health standards. The source of drinking water used by KNOXVILLE is Purchased Ground Water.

We want our valued customers to be informed about their water quality. If you would like to learn more, please feel free to attend any of our regularly scheduled meetings at the Knoxville Police Dept on the 1st and 3rd Monday of every month. 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 City Hall or call our water operator, Larry Lawson, at 309-289-2512. 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.

WHERE YOUR WATER COMES FROM

In March of 2004 the City started purchasing its water from the City of Galesburg. In the 1950's the City of Galesburg, with the vision to provide better water, made the decision to abandon its deep wells in Galesburg and start obtaining groundwater from an aquifer located near Oquawka, Illinois. An aquifer is an under-ground geological formation that contains water. A collector well and three drilled, gravel-packed wells withdraw the groundwater from the aquifer. The City of Knoxville maintains three of its wells located near the Water Department Facility in Knoxville. These wells are operational, but for emergency use only.

SOURCE WATER ASSESSMENT SUMMARY

SUSCEPTIBILITY TO CONTAMINATION:

To determine the City of Galesburg's susceptibility to groundwater contamination, the Illinois EPA reviewed an engineering report for the City of Galesburg.

Based on the above document and water quality monitoring data, this community water supply's source water is susceptible to SOC and VOC contamination. Also, as a result of monitoring conducted at the wells and entry point to the distribution system, the land use activities, and the source water protection initiatives by the city, the City of Galesburg's source water is not susceptible to IOC contamination.

Furthermore, in anticipation of the U.S. EPA's proposed Ground Water Rule, the Illinois EPA has determined that the City of Galesburg's wells are not vulnerable to viral contamination. This determination is based on the evaluation of the following criteria during the Vulnerability Waiver Process: the community's wells are properly constructed with sound integrity and proper site conditions; a hydro geologic barrier exists that prevents 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. However, having stated this, the "[U.S.] EPA is proposing to require States to identify systems in karst, gravel, and fractured rock aquifer systems as sensitive and these systems must perform routine source water monitoring." Because some of the community's wells are constructed in an unconfined sand and gravel aquifer, the Illinois EPA evaluated the well hydraulics associated with the City of Galesburg's well field. The wells range between 74 and 2094 feet of overburden. This should provide an adequate degree of filtration to prevent the movement of pathogens into the wells.

SOURCE WATER PROTECTION EFFORTS:

The Illinois Environmental Protection Act provides minimum protection zones of 400 and 200 feet for the City of Galesburg's wells. The Illinois EPA regulates these minimum protection zones. To further reduce the risk to the source water, the facility has implemented a wellhead protection program, which includes a management and education committee, source water protection management strategies, and contingency planning. This effort resulted in the community water supply receiving a special exception permit from the Illinois EPA, which allows a reduction in the SOC and VOC monitoring. The outcome of this monitoring reduction has saved the facility considerable laboratory analysis costs.

Further information on our community water supply's source water assessment is available on the USGS website at http://il.water.usgs.gov or by calling the Groundwater Section of the Illinois EPA at 217-785-4787.

CONTAMINANTS - EDUCATIONAL INFORMATION

1. 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 at (800) 426-4791.

2. 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 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 eater, 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.satewater/lead.

3. 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 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 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.

4. In order to ensure that tap water is safe to drink, 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.

DEFINITION OF TERMS - For Water Quality Table

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.
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 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.
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.
Level Found: This column represents an average of sample results data collected during the Consumer Confidence Report (CCR) calendar year. In some cases, it may represent a single 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.
Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.
N/A: Not applicable
*Avg – Regulatory compliance with some MCLs are based on running annual average of monthly samples
Unit of Measurement:
ppm-milligrams per liter or parts per million – or one ounce in 7,350 gallons of water.
ppb-micrograms per liter or parts per billion – or one ounce in 7,350,000 gallons of water.

WATER QUALITY DATA TABLE FOOTNOTES

COPPER This is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilsons Disease should consult their personal doctor.
LEAD Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems
or high blood pressure.
IRON This contaminant is not currently registered by USEPA. However, the state has set an MCL for this contaminant for supplies serving a population of 1000 or more.
MANGANESE This contaminant is not currently registered by USEPA. However, the state has set an MCL for this contaminant for supplies serving a population of 1000 or more.
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.
ZINC This contaminant is not currently regulated by USEPA. However, the state regulates.

2014 REGULATED CONTAMINANTS

LEAD & COPPER	MCLG	ACTION LEVEL (AL)	90TH PERCENTILE	# SITES OVER AL	UNITS	DATE OF SAMPLE	VIOLATION	LIKELY SOURCE OF CONTAMINATION
Copper	1.3* 1.3**	1.3* 1.3**	0.12* 0.970**	0* 1 of 30**	Ppm*	8/21/2013* 9/30/2012**	No* No**	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	0* 0**	15* 15**	4.2* 14**	1* 3 of 30**	Ppb*	8/21/2013 9/30/2012**	No* No**	Corrosion of household plumbing systems; Erosion of natural deposits.

COLIFORM BACTERIA	MCLG	MCL	HIGHEST NUMBER OF POSITIVE	FECAL COLIFORM OF E. COLI MCL	TOTAL # POSITIVE SAMPLES		VIOLATION	LIKELY SOURCE OF CONTAMINATION
Coliform Bacteria	0	1	1	N/A	0		No	Naturally present in the environment.

CONTAMINANT (Unit of Measurement)	MCLG	MCL	HIGHEST LEVEL DETECTED	RANGE OF DETECTIONS	UNITS	DATE OF SAMPLE	VIOLATION	LIKELY SOURCE OF CONTAMINATION
INORGANIC CONTAMINANTS								
Arsenic	0**	10**	1.8**	N/A**	Ppb**	8/6/2012**	No**	Erosion of natural deposits; Run off from orchards; Run off from glass and electronics production waste.
Barium	2* 2**	2* 2**	0.043* 0.075**	0.015-0.043* NA**	Ppm* Ppm**	2014* 8/6/2012**	No* No**	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Flouride	4* 4**	4* 4**	2.11* 0.944**	0.297-2.11* NA**	Ppm* Ppm**	2014* 8/6/2012**	No* No**	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Zinc Nitrate (As Nitrogen) Chromium	5* 10* 10** 100*	5* 10* 10** 100*	1.1* 0.04* 0.09** 6.9*	0-1.1* 0 – 0.04* NA** 0 – 6.9*	Ppm* Ppm* Ppm** Ppb*	2014* 2014* 8/6/2014** 4/6/2011*	No* No* No** No*	Naturally occurring; discharge from metal factories. tanks, sewage; Erosion of natural deposits. Discharge from steel and pulp mills; erosion of natural deposits.
DISINFECTANTS & DISINFECTION BY-PRODUCTS								
Chlorine	MRDLG=4* 4**	MRDL=4* 4**	0.9* 0.8**	0.5-1* 0.6-1**	Ppm* Ppm**	12/31/14* 2014**	No* No**	Water additive to control microbes.
Haloacetic Acids (HAA5)	NA* NA**	60* 60**	39* 29**	39-39* 21.8-38**	Ppb* Ppb**	2014* NA**	No* No**	By-product of drinking water disinfection.
TTHMS [Total Trihalomethanes]	NA* NA**	80* 80**	72* 72**	49.74-71.78* 42.06-75.99**	Ppb* Ppb**	2014 NA**	No* No**	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.								
SYNTHETIC ORGANIC CONTAMINANTS INCLUDING PESTICIDED AND HERBICIDES								
Benzo (a) pyrene	0*	200*	100*	0-120*	ppt*	2014	No*	Leaching from linings of water storage tanks & distribution lines.
STATE REGULATED CONTAMINANTS								
Iron	NA* NA**	1.0* 1.0**	5.3* 0.074**	1.5-5.3* NA**	ppm* ppm**	2014* 8/6/2012**	No* No**	Erosion of naturally occurring deposits. This contaminant is not currently regulated by the USEPA. However, the state regulates.
Manganese	150* 150**	150* 150**	35* 9.9**	4.7-35* NA**	Ppb* Ppb**	2014* 8/6/2012**	No* No**	Erosion of naturally occurring deposits. This contaminant is not currently regulated by the USEPA. However, the state regulates.
Sodium	NA* NA**	NA* NA**	300* 13**	120-300* NA**	Ppm* Ppm**	2014* 8/6/2012**	No* No**	Erosion of naturally occurring deposits; Used in water softner regeneration.
RADIOACTIVE CONTAMINANTS								
Combined Radium (pCi/L) 226/228 Uranium (ppb)	0* 0**	5* 30**	7.71* 0.894**	3.12-7.71* NA**	pCi/L* ppb**	2014* 4/21/2008**	No* No**	Erosion of natural deposits.
Gross alpha excluding radon & uranium	0** 0*	15** 15*	1.84** 28.5*	NA 8.31-28.5*	pCi/L** pCi/L*	8/10/2009** 2014*	No** No*	Erosion of natural deposits.

UNREGULATED CONTAMINANT MONITORING RULE 3 (UCMR3) – GALESBURG

Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurance of unregulated contaminants in drinking water and whether future regulation is warranted. A maximum contaminant level (MCL) for these substances has not been established by either state or federal regulations, nor has mandatory health effects language.

CONTAMINANT DETECTED			HIGHEST LEVEL DETECTED	RANGE OF DETECTIONS		DATE OF SAMPLE		TYPICAL SOURCE
Chromium – Total (ppb)**			0.245**	N/A**		10/14/2013**		Naturally occurring element; used in making steel and other alloys; used for chrome plating, dyes and pigments, leather tanning, and wood preservation.
Chromium – 6 (ppb)**			0.261**	N/A**		10/14/2013**		Naturally occurring element; used in making steel and other alloys; used for chrome plating, dyes and pigments, leather tanning, and wood preservation.
Strontium (ppb)**			100.791**	5.709-100.791**		10/14/2013**		Naturally occurring element; historically, commercial use of strontium has been in the faceplate glass of cathoderay tube television to block x-ray emissions.
1,4-Dioxane (ppb)**			0.12831**	N/A**		10/14/2013**		Cylic aliphatic ether; used as a solvent or solvent stabilizer in manufacture and processing of paper, cotton, textile products, automotive coolant, cosmetics and shampoos, cleaning agent, surface coating, and adhesive agent.
Perfluorooctanoic Acid (ppd)** (PFOA)			0.02338**	N/A**		10/14/2013**		Perfluorinated aliphatic carboxylic acid; used for its emulsifier and surfactant properties in or as fluoropolymers (such as Teflon), fire-fighting foams, cleaners, cosmetics, greases and lubricants, paints, polishes, adhesives and photographic films.

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 the data may be more than one year old.

* City of Knoxville results
** City of Galesburg results

Our water system was required to monitor for the contaminants required under the Unregulated Contaminant Monitoring Rule (UCMR). Results may be obtained by calling 309-289-2512.