

Knox County Water and Wastewater Department
www.knoxh2o.com
Drinking Water Consumer Confidence Report 2015

Ray Withers, Superintendent

The Knox County Water and Wastewater Department has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included within this report is general health information, water quality test results, how to participate in decisions concerning your drinking water and water system contacts.

Source Water Information

Our source of water is withdrawn from 5 ground water wells, located approximately one half mile off County Rd. 35, southeast of Howard. Chemicals are added to ensure public health & safety. Those chemicals are: Chlorine for disinfection, Fluoride to strengthen tooth enamel and a polyphosphate to sequester iron & manganese to prevent staining of plumbing fixtures.

What are sources of contamination to drinking water?

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 include: (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife. (B) 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. (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses. (D) 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. (E) Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

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. Knox County Water & Wastewater District 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 cooking or drinking. 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 at (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

Knox County Water District #1 Wellhead Protection Plan for the Howard Well field indicates the aquifer (water-rich zone) that supplies water to the Howard Well Field has a high susceptibility to contamination. This determination is based on the following: ***Lack of protective layer of clay overlying the aquifer, Shallow depth (less than 15 feet below ground surface) of the aquifer, the presence of significant potential contaminant sources in the protection area.*** This susceptibility rating means that under currently existing conditions, the likelihood of the aquifer becoming contaminated is high. Implementing appropriate protective measures can minimize this likelihood. Knox County has recently put such measures into proactive, such as eliminating farming near the well field and planting trees in April 2003. The County has posted signs in and around the protection area. These are just a few of the protective strategies currently being implemented. More information about the source water assessment or what consumers can do to help protect the aquifer is available by calling Ray Withers at 740-397-7041.

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 bottle water, which must provide the same protection for public health.

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 Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

Who needs to take special precautions?

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 infection. 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).

About your drinking water

The EPA requires regular sampling to ensure drinking water safety. The Knox County Water and Wastewater District #1 has a current unconditioned license to operate our water system and have conducted 96 routine total coliform bacteria negative samples (8 per month) in 2015. The Ohio EPA requires us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate is more than one year old. Listed below is information on those contaminants that were found in the Knox County Water District #1 water supply.

CONTAMINANTS	MCLG	MCL	LEVEL FOUND	RANGE OF DETECTIONS	VIOLATIONS	SAMPL E YEAR	TYPICAL SOURCE OF CONTAMINATS
Antimony, Total (PPb)	6	6	<4.0	NA	NO	2015	Erosion of natural deposits
Arsenic, Total (PPb)	0	10	<3.0	NA	NO	2015	Erosion of natural deposits
Barium, Total (PPb)	2000	2000	33.5	<25-44.7	NO	2015	Erosion of natural deposits
Beryllium, Total (PPb)	4	4	<1.0	NA	NO	2015	Erosion of natural deposits
Cadmium, Total (PPb)	5	5	<1.0	NA	NO	2015	Erosion of natural deposits
Chromium, Total (PPb)	100	100	<5.0	NA	NO	2015	Erosion of natural deposits
Cyanide, Total (PPb)	200	200	<10.0	NA	NO	2015	Erosion of natural deposits
Fluoride, Total (PPb)	4	4	1.06	1.28-0.86	NO	2015	Erosion of natural deposits
Nitrate	10	10	<0.10	NA	NO	2015	Runoff from fertilizer use; leaking from septic tanks, sewage; erosion of natural deposits
Nitrite	1	1	<0.10	NA	NO	2015	Runoff from fertilizer use; leaking from septic tanks, sewage; erosion of natural deposits
Mercury, Total (PPb)	2	2	<0.5	NA	NO	2015	Erosion of natural deposits
Nickel (PPb)	100	100	<10.0	NA	NO	2015	Erosion of natural deposits
Selenium, Total (PPb)	50	50	<5.0	NA	NO	2015	Erosion of natural deposits
Thallium, Total (PPb)	0.5	2	<1.5	NA	NO	2015	Erosion of natural deposits
Sulfate (PPM)	NA	NA	27.4	NA	NO	1999	Erosion of natural deposits
Lead (PPb) (1)	0	AL=15	<5.0	NA	NO	2013	Erosion of natural deposits
Copper (PPM) (2)	1.3	AL=1.3	0.54	NA	NO	2013	
Trihalometanes, Total (PPb)	NA	80	21.0	NA	NO	2015	By-product of drinking water chlorination
Total Haloacetic Acid (PPb)	NA	60	6.3	NA	NO	2015	By-product of drinking water chlorination
Alachlor (PPb)	0	2	<.20	NA	NO	2015	Herbicide Runoff
Simzine (PPb)	0.4	0.4	<0.35	NA	NO	2015	Herbicide runoff
Atrazine (PPb)	3	3	<.30	NA	NO	2015	Herbicide Runoff
Benzene (PPb)	0	0.5	<0.50	NA	NO	2015	Discharge from factories, leaching from gas storage tanks and landfills
Carbon Tetrachloride (PPb)	0	0.5	<0.50	NA	NO	2015	Discharge from chemical plants and other chemical activities
Chlorobenzene (PPb)	0.1	0.1	<0.50	NA	NO	2015	Discharge from chemical and agricultural chemical factories
o-dichorobenzene (PPb)	0.6	0.6	<0.50	NA	NO	2015	Discharge from industrial chemical factories
p-dichorobenzene (PPb)	0.75	0.75	<0.50	NA	NO	2015	Discharge from chemical factories
1,2-dichoroethane (PPb)	0	0.5	<0.50	NA	NO	2015	Discharge from chemical factories

1,1-dichloroethylene (PPb)	0.7	0.7	<0.50	NA	NO	2015	Discharge from chemical factories
Cis-1,2-dichloroethylene	0.7	0.7	<0.50	NA	NO	2015	Discharge from chemical factories
trans-1,2-Dichloroethylene (PPb)	0.1	0.1	<0.50	NA	NO	2015	Discharge from chemical factories
Dichloromethane (PPb)	0	0.5	<0.50	NA	NO	2015	Discharge from drug and chemical factories
1,2-dichloropropane (PPb)	0	0.5	<0.50	NA	NO	2015	Discharge from chemical factories
Ethylbenzene (PPb)	0.7	0.7	<0.50	NA	NO	2015	Discharge from petroleum refineries
Styrene (PPb)	0.1	0.1	<0.50	NA	NO	2015	Discharge from rubber and plastic factories, leaching from landfills
Toluene (PPb)	1	1	<0.50	NA	NO	2015	Discharge from petroleum factories
1,1,1-trichloroethane (PPb)	2.0	2.0	<0.5	NA	NO	2015	Discharge from metal degreasing sites and other factories
Tetrachloroethylene (PPb)	0	0.5	<0.50	NA	NO	2015	Discharge from factories and dry cleaners
1,2,4-trichlorobenzene (PPb)	7	7	<0.50	NA	NO	2015	Discharge from textile finishing factories
1,1,2-trichloroethane (PPb)	0.3	0.5	<0.50	NA	NO	2015	Discharge from industrial chemical factories
Vinyl Chloride (PPb)	0	0.2	<0.50	NA	NO	2015	Leaching from PVC pipes, discharge from factories
Total Xylenes	10	10	<0.50	NA	NO	2015	Discharge from petroleum and chemical factories
Gross Alpha particles (pCi/L)	0	15	3.0	NA	NO	2015	Erosion of natural deposits
Radium 228 (pCi/L)	0	5	0.90	NA	NO	2015	Erosion of natural deposits of certain minerals

(1)Lead – ZERO out of twenty homes was found to have a lead level in excess of the Action Level of 15 ppb

(2)Copper – ZERO out of twenty samples was found to have a copper level in excess of the Action Level of 1.3 ppm

Definitions of some terms contained within this report

-Maximum Contaminant Level Goal (MCLG): 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.

-Maximum Contaminant Level (MCL): The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

-Parts per Million (ppm) or Milligrams per Liter (mg/l) are units of measure for concentration of a contaminant. A part per million corresponds to one second in 31.7 years.

-Parts per Billion (ppb) or Micrograms per Liter (ug/L) are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.

-Action Level (AL): The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

-NA – The “NA” symbol means non-applicable.

-Maximum Residual Disinfectant Level Goal (MRDLG): The level of 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.

-Maximum Residual Disinfectant Level (MRDL): 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.

What Should I do?

Additional information may be obtained by contacting Knox County Water District #1 at:

Contact Person: Ray Withers

Phone Number: 740-397-7041

Mailing Address: 17602 Coshocton Rd, Mount Vernon, OH 43050

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

PWSID: OH4202012 Facility ID: DS1