

Ohio County Water District Water Quality Report 2014



Some or all of these definitions may be found in this report:

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 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 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.

Maximum Residual Disinfectant Level Goal (MRDLG) - 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.

Below Detection Levels (BDL) - laboratory analysis indicates that the contaminant is not present.

Not Applicable (N/A) - does not apply.

Parts per million (ppm) - or milligrams per liter, (mg/l). One part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) - or micrograms per liter, (µg/l). One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per trillion (ppt) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

Parts per quadrillion (ppq) - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.

Picocuries per liter (pCi/L) - a measure of the radioactivity in water.

Millirems per year (mrem/yr) - measure of radiation absorbed by the body.

Million Fibers per Liter (MFL) - a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU) - a measure of the clarity of water. Turbidity has no health effects. However, turbidity can provide a medium for microbial growth. Turbidity is monitored because it is a good indicator of the effectiveness of the filtration system.

Variances & Exemptions (V&E) - State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Action Level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system shall follow.

Treatment Technique (TT) - a required process intended to reduce the level of a contaminant in drinking water.

Spanish (Español) Este informe contiene información muy importante sobre la calidad de su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.

This report is designed to inform the public about the quality of water and services provided on a daily basis. Our commitment is to provide a safe, clean, and reliable supply of drinking water. We want to assure that we will continue to monitor, improve, and protect the water system and deliver a high quality product.

The Ohio County Water District treats surface water from Green River. An analysis of the susceptibility of the water supply to contamination indicates that this susceptibility is generally moderate. However, there are a few areas of high concern. Potential contaminant sources of concern include major roads and statewide coverage of row crops. These are rated as high because of the contaminant type, their proximity, and the high chance of release. The potential contaminant sources of medium susceptibility include areas of forest and woodlands, oil and gas wells, and coverage of pasture and hay. The complete Source Water Assessment is available for review during normal business hours at the Ohio County Water District.

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 may be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

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 may pick up 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 (sewage plants, septic systems, livestock operations, or wildlife). Inorganic contaminants, such as salts and metals, (naturally occurring or from stormwater runoff, wastewater discharges, oil and gas production, mining, or farming). Pesticides and herbicides, (stormwater runoff, agriculture or residential uses). Organic chemical contaminants, including synthetic and volatile organic chemicals, (by-products of industrial processes and petroleum production, or from gas stations, stormwater runoff, or septic systems). Radioactive contaminants, (naturally occurring or from oil and gas production or mining activities). In order to

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 Manager: Walt Beasley
 270-298-7704
 CCR Contact: Jason Chimm
 270-274-3676

Mailing address:
 P. O. Box 207
 Hartford, KY 42347

Meeting location and time:
 124 E Washington St.
 Hartford, KY
 3rd Monday each month at 5:00 PM

ensure that tap water is safe to drink, 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 to provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ 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).

Information About 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. Your local public water system 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 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>.



The data presented in this report are from the most recent testing done in accordance with administrative regulations in 401 KAR Chapter 8. As authorized and approved by EPA, the State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data in this table, though representative, may be more than one year old.

Contaminant [code] (units)	MCL	MCLG	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination	Unregulated Contaminants (U.C.M.R.3)	
								average	range (ppb)
Turbidity (NTU) TT				0.09	No	No	Soil runoff	0.213	0 to 0.61
* Representative samples Less than 0.3 NTU in 95% of monthly samples									
Regulated Contaminant Test Results									
Total Coliform Bacteria [4000] (pCF/L)	5%	0	5%	N/A	2014	No	Naturally present in the environment	0.263	0 to 1.1
Alpha emitters	15	0	1	1 to 1	Apr-11	No	Erosion of natural deposits	152.5	0 to 290
Combined radium	5	0	0.1	0.1 to 0.1	Apr-11	No	Erosion of natural deposits	0.155	0 to 0.23
Uranium (ug/L)	30	0	0.7	0.7 to 0.7	Apr-11	No	Erosion of natural deposits	16	0 to 49
Barium [1010] (ppm)	2	2	0.032	0.032 to 0.032	Jul-14	No	Drilling wastes, metal refineries, erosion of natural deposits	0.11	0 to 0.39
Copper [1022] (ppm) sites exceeding action lev	AL = 1.3	1.3	0.142 (90 th percentile)	0.0088 to 0.246	Jul-14	No	Corrosion of household plumbing systems		
Fluoride [1025] (ppm)	4	4	1	1 to 1	Jul-14	No	Water additive which promotes strong teeth		
Lead [1030] (ppb) sites exceeding action lev	AL = 15	0	4 (90 th percentile)	0 to 5	Jul-14	No	Corrosion of household plumbing systems		
Nitrate [1040] (ppm)	10	10	1.9	1.9 to 1.9	Feb-14	No	Fertilizer runoff; leaching from septic tanks, sewage, erosion of natural deposits		
Atrazine [2050] (ppb)	3	3	0.115	BDL to 0.26	Jun-14	No	Runoff from herbicide used on row crops		
Total Organic Carbon (ppm) (measured as ppm, but reported as a ratio)	TT*	N/A	(lowest average)	0.53 to 3.2 (monthly ratios)	2014	No	Naturally present in environment.		
*Monthly ratio is the % TOC removal achieved to the % TOC removal required. Annual average must be 1.00 or greater for compliance.									
Chlorine (ppm)	MIRD/L = 4	MIRD/L = 4	1.58 (highest average)	0.50 to 2.20	2014	No	Water additive used to control microbes.		
HAA (ppb) (Stage 2) [haloacetic acids]	60	N/A	39 (high site average)	11 to 56 (range of individual sites)	2014	No	Byproduct of drinking water disinfection		
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	64 (high site average)	10 to 100 (range of individual sites)	2014	No	Byproduct of drinking water disinfection.		

Our water system has sampled for a series of unregulated contaminants. Unregulated contaminants are those that don't yet have a drinking water standard set by EPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a standard. As our customers, you have a right to know that these data are available. If you are interested in examining the results, please contact our office during normal business hours.

Unregulated Contaminants (U.C.M.R.3)	average	range (ppb)	date
vanadium	0.213	0 to 0.61	Aug-14
molybdenum	0.263	0 to 1.1	Aug-14
strontium	152.5	0 to 290	Aug-14
chromium-6	0.155	0 to 0.23	May-14
chlorate	16	0 to 49	Aug-14
total chromium	0.11	0 to 0.39	Aug-14

EPA has not established drinking water standards for unregulated contaminants. There are no MCL's and therefore no violations if found.

Fluoride (added for dental health)	Average	Range of Detection
	1.10	0.8 to 1.32
Sodium (EPA guidance level = 20 mg/L)	12	N/A

Ohio County Water District recently failed to comply with a required testing procedure. Even though this was not an emergency, as our customers, you have a right to know what happened and what we did to correct the situation.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During August 2014 we did not complete all monitoring or testing for turbidity, and therefore cannot be sure of the quality of your drinking water during that time.

We are required to monitor turbidity continuously at each filter during the treatment process. During August 2014, even though the finished water met compliance requirements, the monitoring equipment for an individual filter failed. Prior to the repair we failed to collect grab samples every four hours of operation and this resulted in a monitoring violation.

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

There is nothing you need to do at this time. You may continue to drink the water. If a situation arises where the water is no longer safe to drink, you will be notified within 24 hours.

For more information, please contact Mark Alford at 270-298-7704 or P.O. Box 207 Hartford, KY 42347.

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.