



or visit our web site at www.omu.org
 Owensboro, Kentucky 42302-0806
 P.O. Box 806
 2070 Tamarack Road
 (270) 926-3200

Public Water System ID # KY0300336
 For more information, contact us at:

Other information

Alpha emitters – Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

Combined radium health effects – Some people who drink water containing radium-226 or –228 in excess of the MCL over many years may have an increased risk of getting cancer.

Source water assessment information

The source of raw water for Owensboro Municipal Utilities is the Ohio River Alluvium in Daviess County. An analysis of the overall susceptibility to contamination of the Owensboro Municipal Utilities’ water supply indicated that this susceptibility is moderate. There are a total of 220 potential sources of contamination within the wellhead protection area with the following susceptibility rankings: 17 high, 165 medium, and 38 low. Sources of high potential impact include: above ground storage tanks, underground storage tanks, an auto repair facility and industrial land use. Sources of moderate to low potential impact include: above ground storage tanks, underground storage tanks, auto repair facilities, industrial land use, professional offices, dry cleaners, food service facilities, quarries, hazardous material storage, and municipal land use. This is a summary of the susceptibility analysis. The complete Susceptibility Analysis Report is available at the Green River Area Development District and at the Division of Water.

Do I need 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 infections. These people should seek the 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).

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Our water system violated one or more drinking water standards over the past year. Even though these were not emergencies, as our customers, you have a right to know what happened and what we did to correct these situations.

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 2007 we did not complete the reporting for Total Trihalomethanes, Haloacetic Acids 5 and Dioxins and therefore cannot be sure of the quality of our drinking water during that time.

What should I do?

There is nothing you need to do at this time. You do not need to use an alternative (e.g., bottled) water supply.

The table below lists the contaminant(s) we did not properly test for during the last year, how often we are supposed to sample for Trihalomethanes, Haloacetic Acid 5 and Dioxins and how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which follow-up samples were (or will be) taken.

Contaminant	Required Sampling Frequency	Number of Samples Taken	Samples Should Have Been Taken	When Samples Were or Will Be Taken
Total Trihalomethanes	1	1	1	Oct-07
Total Haloacetic	1	1	1	Oct-07
Dioxin	2	1	2007	Feb-08
Dioxin	2	0	2007	2008

What happened? Who is at risk? What is being done?

Owensboro Municipal Utilities completed all necessary sampling required for Total Trihalomethanes and Total Haloacetic acids. The outside laboratory completing the analysis failed to complete all required information on the reporting form for both contaminants. A corrected analysis form was faxed to the State on February 20, 2008 (the same day OMU was notified of the problem). The omission of the information resulted in the notice of violation. All results from Total Trihalomethanes and Total Haloacetic acids were well below current State and Federal guidelines. At no time were OMU customers at any risk to public health.

In the case of dioxin, initially Kentucky was following a reduced sampling waiver. Notification was received from the State in 2003 saying they were pursuing renewing the waiver and to proceed as if the waiver were in effect. However, the waiver did not occur and KY utilities were not notified. One sample was collected in the required time frame (4th quarter of 2007) and the other was collected in the 1st quarter of 2008. With the sampling schedule still unclear at this time OMU has contracted to sample each quarter of 2008 to prevent any additional problems. In the past Dioxin has never been found in OMU water. OMU customers are not at any greater risk than previous years for this contaminant.

We routinely monitor for drinking water contaminants. During the month of May 2007 we took 204 samples to test for the presence of coliform bacteria. Twelve (12) or 5.88 percent of our samples showed the presence of coliform bacteria. The standard is that no more than 5 percent of our samples show the presence of coliform bacteria. The system was flushed and resampled. No coliform bacteria were found with the retesting. Customers were notified by bill stuffer and the information was available on the internet. Total Coliform are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

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.

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 service system is responsible for providing high quality drinking water, but cannot control the variety of material 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>.

Water Quality Report

Your Water Quality Report

For over 100 years, Owensboro Municipal Utilities has been providing water to the citizens of Owensboro. OMU supplies water to over 55,459 residents in Owensboro. We also sell water to three districts that serve the remainder of Daviess County and customers in some surrounding counties. Owensboro Municipal Utilities' mission is to serve our community by providing quality utility services at the most economical cost, and we never forget that commitment.

At OMU, we take water seriously. Just how seriously do we take it? We maintain our own water quality testing laboratories. The experienced and certified water quality personnel analyze chemical and bacteriological tests on water samples throughout the year. These samples are taken from each section of the treatment process as well as from various sites around Owensboro and analyzed 365 days a year to assure water safety and quality. Many believe that Owensboro gets its water out of the Ohio River. However, you might be surprised to learn that Owensboro, a ground water source, actually gets its water from a large, deep underground aquifer on the northeast side of Owensboro. This large aquifer contains water that has been naturally filtered as it works its way through layers of the earth. Water is pumped from wells that tap into this water supply. The water from each well is transported through a central gathering line and piped to one of the two water treatment plants. The following report will give you an overview of your water quality for the calendar year 2007.

How can I get involved?

Customers of Owensboro Municipal Utilities may ask questions about their water quality at the regular monthly meeting of the City Utility Commission. Meetings are normally held on the third Thursday of each month at 4 p.m. Meetings are held in the third floor boardroom at the OMU Customer Service Center, 2070 Tamarack Road. Other sources of information on water quality include OMU's website (www.omu.org), the American Water Works Association website (www.awwa.org), and the Kentucky Division of Water's website (www.water.ky.gov/dw). For more information about OMU's water, customers may also contact Stephanie Smith at OMU at 270-926-3200 ext. 323.

What is the source of my water?

Owensboro Municipal Utilities pumps water from deep wells to two water treatment plants. The wells are located in one aquifer that runs along US Highway 60 East and is protected by a clay layer. When the ground water reaches the treatment plants it is aerated to remove any odors that have been picked up by the extraction process and to begin oxidizing minerals picked up from the ground. The water is then softened with lime. Water from the ground tends to have a very high amount of hardness (250-350 ppm). OMU reduces this by almost half before the water is further processed (150-200 ppm). Next, the water is chlorinated to kill any microorganisms that may have survived the previous processes. The water is then filtered through anthracite, sand and gravel to remove any turbidity. Lastly, fluoride and a polyphosphate are added to the water. A copy of the wellhead protection plan and the source water assessment for Daviess County can be obtained from the offices of Green River Area Development offices at 3860 US Highway 60 West or by calling 270-926-4433.

Why are there contaminants in my water?

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 the water poses a health risk. More information about contaminants and potential health risks can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap 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 human activity.

Contaminants that may be present in source water used for public supplies or bottled water includes (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 chemicals, which are byproducts 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. In order to assure that tap water is safe to drink, the EPA prescribes regulations that limit the amounts of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Water Quality Table

OMU has laboratories located at both of its water treatment facilities. Water is tested daily for basic parameters (ex: fluoride and total hardness). These tests are conducted by trained operators and water quality personnel. The Cavin Plant also has a certified laboratory for total coliform and E. coli. Additional testing is sent to certified labs that have experience analyzing for other water contaminants. OMU conducts a vast amount of testing each year. Contaminants such as lead and copper are required less frequently than once a year. Data for lead and copper represent the latest round of sampling. The following table represents the detected contaminants.

2007 WATER QUALITY INFORMATION

This report is to inform you of the water quality for the calendar year 2007.

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. Unless otherwise noted, the report level is the highest level detected.

	Allowable Levels	Highest Single Measurement	Lowest Monthly %	Violation	Likely Source
Turbidity (NTU) TT * Representative samples of filtered water	No more than 1 NTU* Less than 0.3 NTU in 95% of monthly samples	1	99	No	Soil runoff; lime addition in water treatment process

Regulated Contaminant Test Results

Contaminant [code] (units)	MCL	MCLG	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination
Microbiological Contaminants							
Total Coliform Bacteria # or % positive samples	5%	0	6%	N/A	May	Yes	Naturally present in the environment
Radioactive Contaminants							
Alpha emitters [4000] (pCi/L)	15	0	0.3	0.3 to 0.3	Jun-07	No	Erosion of natural deposits
Combined radium (pCi/L)	5	0	0.1	0.1 to 0.1	Jun-07	No	Erosion of natural deposits
Inorganic Contaminants							
Barium [1010] (ppm)	2	2	0.03	0.02 to 0.032	Jun-07	No	Drilling wastes; metal refineries; erosion of natural deposits
Chromium [1020] (ppb)	100	100	0.5	0 to 1	June-07	No	Discharge from steel and pulp mills; erosion of natural deposits
Copper [1022] (ppm) sites exceeding action level 0	AL=1.3	1.3	0.000	0 to 0	June-05	No	Corrosion of household plumbing systems
Fluoride [1025] (ppm)	4	4	0.91	0.73 to 1.1	Feb-07	No	Water additive which promotes strong teeth
Lead [1030] (ppb) sites exceeding action level 0	AL =15	0	0.000 (90th Percentile)	0 to 2	Jun-05	No	Corrosion of household plumbing systems
Nitrate [1040] (ppm)	10	10	0.43	0.244 to 0.584	Oct-07	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Disinfectants/Disinfection Byproducts and Precursors

Chlorine (ppm)	MRDL=4	MRDLG=4	1.24 (highest average)	0.46 to 1.73	N/A	No	Water additive used to control microbes
HAA (ppb) (all sites) [Haloacetic acids]	60	N/A	13 (highest average)	8 to 15 (range of system sites)	N/A	No	Byproduct of drinking water disinfection
HAA (ppb) (IDSE) [Haloacetic acids]	IDSE (individual distribution system evaluation) is a study to determine future individual sites.			5.893 to 16.479 (range of individual sites)	IDSE initiated	No	Byproduct of drinking water disinfection
TTHM (ppb) (IDSE) [total trihalomethanes]	IDSE (individual distribution system evaluation) is a study to determine future individual sites.			19.61 to 40.6 (range of individual sites)	IDSE initiated	No	Byproduct of drinking water disinfection
TTHM (ppb) [total trihalomethanes]	80	N/A	54 (highest average)	34 to 60 (range of individual sites)	N/A	No	Byproduct of drinking water disinfection

Maximum Contaminant Level Goal or MCLG: the level of a contaminant in drinking water below which there is no known or expected risk to public health. MCLGs allow for a margin of safety.

Maximum Contaminant Level or 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.

Maximum Residual Disinfectant Level or 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 or 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.

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

NTU: nephelometric turbidity units. Turbidity is used to indicate the effectiveness of filtration. Turbidity is a measure of the cloudiness of water.

ppm: parts per million **ppb:** parts per billion **≤** = Less than **pCi/L:** Picocuries per liter; a measure of the radioactivity in water.

TT: Treatment technique, a required process intended to reduce the level of a contaminant in drinking water. **N/A:** Not applicable.