



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 language – 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 language – 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 2006 we did not complete the reporting for Total Trihalomethanes and Haloacetic Acids 5 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 and Haloacetic Acid 5 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 Should Have Been Taken
Total Halomethanes	1 per quarter for each plant in operation	7*	7*	Sampling Completed*
Haloacetic Acid 5	1 per quarter for each plant in operation	7*	7*	Sampling Completed*

*Samples were taken January, March, April, July and October 2006.

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

Owensboro Municipal Utilities completed all necessary sampling required. The outside laboratory completing the analysis failed to complete all required information on the reporting form for both contaminants. The contract lab corrected the form and resubmitted the results to the KY Division of Water. The omission of the field resulted in the notice of violation. All results for Total Trihalomethanes and Haloacetic Acids 5 were well below current State and Federal guidelines. At no time were OMU customers at any risk to public health.

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.

In July 2006, Owensboro Municipal Utilities detected E. coli in a compliance sample. The affected area was immediately ordered to boil their water. Each house had a notice hand delivered and an OMU employee knocked on each door. The area was checked for potential leaks and other possible problems. The area was then thoroughly flushed and resampled. All results were negative for total coliform and E. coli. The boil water was then lifted and each household was again delivered a letter and OMU personnel knocked on each door for personal notification.

Fecal coliform/E. Coli. Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.

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 insure 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 delve 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 2006.

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 located 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 Stickler 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 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 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 ensure 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.

2006 WATER QUALITY INFORMATION

This report is to inform you of the water quality for the calendar year 2006.

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	0.77	100	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	3	N/A	May	No	Naturally present in the environment
Fecal coliform & E.coli % positive samples	0%	0	1	N/A	Jul	Yes	Human and animal fecal
Radioactive Contaminants							
Alpha emitters [4000] (pCi/L)	15	0	3.1	3.1 to 3.1	Jun-06	No	Erosion of natural deposits
Combined radium (pCi/L)	5	0	0.4	0.4 to 0.4	Jun-06	No	Erosion of natural deposits
Inorganic Contaminants							
Barium [1010] (ppm)	2	2	0.033	0.024 to 0.033	Jun-06	No	Drilling wastes; metal refineries; erosion of natural deposits
Copper [1022] (ppm) sites exceeding action level 0	AL =1.3	1.3	0.000 (90th Percentile)	0 to 0	Jun-05	No	Corrosion of household plumbing systems
Fluoride [1025] (ppm)	4	4	1.22	0.8 to 1.22	Jun-06	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
Mercury [1030} (ppb)	2	2	0.1	0.1 to 0.1	Jun-06	No	Erosion of natural deposits, refineries and factories; landfills runoff from cropland.
Nitrate [1040] (ppm)	10	10	2.41	0.379 to 2.41	Oct-06	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite [1041] (ppm)	1	1	0.0046	0.0013 to 0.0046	Jun-06	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	1.23 (highest average)	0.56 to 1.75	N/A	No	Water additive used to control microbes
HAA (ppb)	60	N/A	12 (highest average)	8 to 18 (range of individual sites)	N/A	No	Byproduct of drinking water disinfection
TTHM (ppb) [total trihalomethanes]	80	N/A	47 (highest average)	26 to 61 (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.