



Water testing performed in 2009



Presented By:
**OLDHAM COUNTY
WATER DISTRICT**

PWS ID#: KY0930333

Maintaining High Standards

Once again we are proud to present our annual water quality report. This report covers all testing performed between January 1, 2009, and December 31, 2009. The events of the past few years have presented many of us with challenges we could not have imagined. Yet in spite of this, we have maintained our high standards in an effort to continue delivering the best quality drinking water possible. There may be other hurdles in the future, but know that we will always stand behind you and the drinking water we work diligently to provide.

We encourage you to share your thoughts with us on the information contained in this report. Should you ever have any questions, we are always available to assist you.

Important Health Information

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 transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or www.epa.gov/safewater/hotline/.



Where Does My Water Come From?

Oldham County Water District customers are fortunate because we enjoy an abundant water supply from a ground water source. The Oldham County Water Treatment Plant draws water from the Ohio River alluvium, which holds several billion gallons of water. The Oldham County Water Treatment Plant was constructed in 1981 to draw from this underground water supply. This ground water supply is constantly being replenished with water from the Ohio River along with natural trans- evaporation. The treatment facility provides roughly 1.5 billion gallons of clean drinking water every year.

Community Participation

You are invited to participate in our public forum and voice your concerns about your drinking water. We meet the second Tuesday of each month at 6 p.m. at the Buckner Office, 3707 West Highway 146, LaGrange, Kentucky.

Questions?

For more information about this report, or for any questions relating to your drinking water, please contact Russell D. Rose, Superintendent, at (502) 222-1690 or visit our Web site at www.oldhamcountywater.com.



Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

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, in some cases radioactive material, and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater 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 stormwater runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

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 U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Water Conservation

You can play a role in conserving water and save yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.

Turn off the tap when brushing your teeth.

Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.

“WHEN THE WELL'S DRY, WE KNOW THE WORTH OF WATER. - Benjamin Franklin”

Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.

Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

Tap vs. Bottled

Thanks in part to aggressive marketing, the bottled water industry has successfully convinced us all that water purchased in bottles is a healthier alternative to tap water. However, according to a four-year study conducted by the Natural Resources Defense Council, bottled water is not necessarily cleaner or safer than most tap water. In fact, about 25 percent of bottled water is actually just bottled tap water (40 percent according to government estimates).

The Food and Drug Administration is responsible for regulating bottled water, but these rules allow for less rigorous testing and purity standards than those required by the U.S. EPA for community tap water. For instance, the high mineral content of some bottled waters makes them unsuitable for babies and young children. Further, the FDA completely exempts bottled water that's packaged and sold within the same state, which accounts for about 70 percent of all bottled water sold in the United States.

People spend 10,000 times more per gallon for bottled water than they typically do for tap water. If you get your recommended eight glasses a day from bottled water, you could spend up to \$1,400 annually. The same amount of tap water would cost about 49 cents. Even if you installed a filter device on your tap, your annual expenditure would be far less than what you'd pay for bottled water.

For a detailed discussion on the NRDC study results, check out their Web site at www.nrdc.org/water/drinking/bw/exesum.asp.

Lead and Drinking Water

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. Oldham County Water 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 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 www.epa.gov/safewater/lead.

What's a Cross-connection?

Cross-connections that contaminate drinking water distribution lines are a major concern. A cross-connection is formed at any point where a drinking water line connects to equipment (boilers), systems containing chemicals (air conditioning systems, fire sprinkler systems, irrigation systems) or water sources of questionable quality. Cross-connection contamination can occur when the pressure in the equipment or system is greater than the pressure inside the drinking water line (backpressure). Contamination can also occur when the pressure in the drinking water line drops due to fairly routine occurrences (main breaks, heavy water demand) causing contaminants to be sucked out from the equipment and into the drinking water line (backsiphonage).

Outside water taps and garden hoses tend to be the most common sources of cross-connection contamination at home. The garden hose creates a hazard when submerged in a swimming pool or when attached to a chemical sprayer for weed killing. Garden hoses that are left lying on the ground may be contaminated by fertilizers, cesspools or garden chemicals. Improperly installed valves in your toilet could also be a source of cross-connection contamination.

Community water supplies are continuously jeopardized by cross-connections unless appropriate valves, known as backflow prevention devices, are installed and maintained. We have surveyed all industrial, commercial, and institutional facilities in the service area to make sure that all potential cross-connections are identified and eliminated or protected by a backflow preventer. We also inspect and test each backflow preventer to make sure that it is providing maximum protection.

For more information, review the Cross-Connection Control Manual from the U.S. EPA's Web site at www.epa.gov/safewater/crossconnection.html. You can also call the Safe Drinking Water Hotline at (800) 426-4791.



What type of container is best for storing water?

Consumer Reports has consistently advised that glass or BPA-free plastics such as polyethylene are the safest choices. To be on the safe side, don't use any container with markings on the recycle symbol showing "7 PC" (that's code for BPA). You could also consider using stainless steel or aluminum with BPA-free liners.

Should I be concerned about what I'm pouring down my drain?

If your home is served by a sewage system, your drain is an entrance to your wastewater disposal system and eventually to a drinking water source. Consider purchasing environmentally friendly home products whenever possible, and never pour hazardous materials (e.g., car engine oil) down the drain. Check with your health department for more information on proper disposal methods.

How much emergency water should I keep?

Typically, 1 gallon per person per day is recommended. For a family of four, that would be 12 gallons for 3 days. Humans can survive without food for 1 month, but can only survive 1 week without water.

Sampling Results

During the past year we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water.

The state requires us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chlorine (ppm)	2009	[4]	[4]	0.76	0.4–1.12	No	Water additive used to control microbes
Fluoride (ppm)	2009	4	4	0.97	0.81–1.06	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAA] (ppb)	2009	60	NA	5	3–6	No	By-product of drinking water disinfection
Nitrate (ppm)	2009	10	10	0.68	0.62–0.75	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb)	2009	80	NA	20	18–22	No	By-product of drinking water chlorination
Turbidity ¹ (NTU)	2009	TT	NA	0.34	0.07–0.34	No	Soil runoff
Tap water samples were collected for lead and copper analyses from sample sites throughout the community (lead was not detected at the 90th percentile)							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2007	1.3	1.3	0.36	0/31	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

¹Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of water quality and the effectiveness of disinfectants.

Definitions

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

MCL (Maximum Contaminant Level): 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.

MCLG (Maximum Contaminant Level Goal): 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.

MRDL (Maximum Residual Disinfectant Level): 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.

MRDLG (Maximum Residual Disinfectant Level Goal): 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.

NA: Not applicable

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

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