City of Bellbrook 2010 Water Quality Report

March 2011

15 E Franklin St
Bellbrook OH 45305

Departments

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Clerk of Council....(937) 848-4321
Zoning .....(937) 848-8477
Police.....(937) 848-8484
Fire .....(937) 848-3272
Service .....(937) 848-8415
Utility Billing .....(937) 848-4638

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The Environmental Protection Agency (EPA) requires all community water systems to annually provide a water quality report to their customers. The Bellbrook Water Department is proud of the fine drinking water it provides and is pleased to show that it meets all water quality standards. This annual water quality report shows the source of water, lists the results of tests, and contains important information about water and health. The Bellbrook Water Department will notify you if there is ever any reason for concern about your water.

The City of Bellbrook continues to improve the water system. In 2010, the City started an addition to the existing water treatment plant which was built in 1996. The water treatment plant provides a reliable supply of quality water to the nearly 10,000 consumers served. The new addition will provide the ability to treat more water, as well as provide more storage for times of high usage. With these and other improvements, the City provides excellent water service at rates that are consistently close to the regional average.

Water Source

The source of Bellbrook's drinking water is ground water pumped from wells drilled into the aquifer that lies beneath the City. The aquifer extends the length of the Miami Valley. Residents are encouraged to report activity or spills that could cause contamination of the aquifer.

The aquifer has a high susceptibility to contamination. This is due to its sensitive nature and the existing potential contaminant sources identified. This does not mean that the well field will become contaminated; only that conditions are such that the ground water could be impacted by potential contaminant sources. Future contamination can be avoided by implementing protective measures. More detailed information is available in the City's Wellhead Protection Report and Susceptibility Analysis, which can be obtained by contacting Ryan Pasley, Water Foreman, at (937) 848-8415.

Required Additional Health Information

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that 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 EPA Safe Drinking Water Hotline at (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 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.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised persons such as individuals with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and some infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The Centers for Disease Control and Prevention and EPA guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants (which, while rare, are more likely to be found in surface water sources than in the ground water used here) are available from the EPA Safe Drinking Water Hotline at (800) 426-4791.

All community water systems shall include the following lead-specific information about lead in drinking water and its effects on children: "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. The City of Bellbrook 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 thirty seconds to two 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. A list of laboratories certified in the State of Ohio to test for lead may be found at www.epa.state.oh.us/ddagw or by calling (614) 644-2752. Information on lead in drinking water, testing methods and steps you can take to minimize exposure is available from the EPA Safe Drinking Water Hotline at (800) 426-4791 or at www.epa.gov/safewater/lead ."

We encourage public interest and participation in our community's decisions affecting drinking water. Regular City Council meetings are scheduled at 7:00 PM on the second and fourth Mondays of each month at 15 E. Franklin St. The Water Foreman will be happy to answer any questions about Bellbrook water quality. Please call (937) 848-8415. For further information, go to the EPA Ground Water & Drinking Water web site at www.epa.gov/safewater .

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Water Softeners

The City of Bellbrook is not required to test for Total Dissolved Solids (TDS) because the source of the water is from ground water. Many residents have water softeners in their homes. Some water softeners may ask for the hardness of our water to measure how to treat the water. Bellbrook water hardness can be measured in two ways:

- 18.22 Grains per Gallon
- 312 Milligrams per Liter

For more information on water softeners, call the Bellbrook Utilities Office at (937) 848-4638.

Water Quality Data Table

Listed are 16 tests in which any level of contaminant (regardless of how small the amount) was detected in Bellbrook's drinking water for the most recent date up to and including 2010. All detected levels are far below allowed limits. Not listed are over two hundred other tests in which **no contaminants** were detected.

The data presented in this report is from the most recent testing done in accordance with EPA regulations by the Bellbrook Water Department. Terms used in the Water Quality Table and in other parts of this report are defined here:

Definitions of some terms contained within this report:

- **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 a little over 11.5 days.
- **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.
- **Maximum Contamination 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.
- **Action Level (for Lead and Copper):** The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements which a water system must follow.

Contaminant	Date Tested	Units	MCL	MCLG	Highest Level Found	Range of Detection	Major Sources	Violations
Regulated at the Treatment Plant								
Fluoride	2010	ppm	4.0	4.0	1.17	.94-1.17	Erosion of natural deposits; water additive to promote strong teeth	No
Nitrate	1/11/10	ppm	10.0	10.0	0.52	N/A	Erosion of natural deposits	No
Regulated in the Distribution System								
Lead **	Aug-08	ppb	AL=15.0	15.0	6.43 (90th %)	<5.0 - 12.4	Corrosion of household plumbing	No
Copper *	Aug-08	ppb	AL=1300	1300	229 (90th %)	<50.0 - 347	Corrosion of household plumbing	No
Trihalomethanes	8/11/08	ppb	80	0	28.8	1.92	By-product of drinking water	No
HAA5 (Haloacetic Acids)	8/11/08	ppb	60	0	7.04	<1.0 7.04	By-product of drinking water chlorination	No
Unregulated Contaminant								
Bromodi-Chloro-Methane	8/11/08	ppb			8.86	N/A	1 of 4 by-products of chlorination -TTHM's	No
Dibromo-Chloro-Methane	8/11/08	ppb	***	***	7.0	N/A	1 of 4 by-products of chlorination -TTHM's	No
Chloroform	8/11/08	ppb	***	***	11.0	N/A	1 of 4 by-products of	No
Bromoform	8/11/08	ppb	***	***	1.92	N/A	1 of 4 by-products of	No
Dibromoacetic Acid	8/11/08	ppb	****	****	2.22	N/A	By-product of drinking water chlorination HAA5	No
Dichloracetic Acid	8/11/08	ppb	****	****	1.62	N/A	By-product of drinking water chlorination HAA5	No
Monobromoacetic Acid	8/11/08	ppb	****	****	<1.0	N/A	By-product of drinking water chlorination HAA5	No
Monochloroacetic Acid	8/11/08	ppb	****	****	<2.0	N/A	By-product of drinking water chlorination HAA5	No
Trichloroacetic Acid	8/11/08	ppb	****	****	1.62	N/A	By-product of drinking water chlorination HAA5	No

Not listed are over 200 other tests in which no contaminants were detected.

Key to Table	
AL=Action Level	TTHM=Total Trihalomethanes
MCL= Max. Contamination Level	HAA5=Haloacetic Acids
MCLG=Max. Contamination Level Goal	* =20 samples, none above AL
ppm=parts per million or milligrams per liter (mg/l)	** =20 samples, two above AL
ppb=parts per billion or micrograms per liter (ug/l)	*** =Added together not to exceed 80 ppb for TTHMs
N/A=Not Applicable	**** =Added together not to exceed 60 ppb for HAA5