

Le-Ax Regional Water District

Drinking Water Consumer Confidence Report

For 2010

Introduction

The **Le-Ax Regional Water District** has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included within this report is general health information, water quality test results, how to participate in decisions concerning your drinking water and water system contacts. We have a current, unconditioned license to operate our water system.

Source Water Information.

The **Le-Ax Regional Water District** receives its drinking water from a horizontal collector well located approximately 200 ft. south of the Hocking River in the northeast corner of section 2 of York Township, Athens County, State of Ohio. It pulls its water from the Hocking River Aquifer.

The treatment that this water requires is iron and manganese removal, filtration, and softening. We also add Fluoride for strengthening of teeth and Chlorine for disinfection.

SOURCE WATER ASSESSMENT

Ohio E.P.A. completed a study of Le-Ax Water District's source water, to determine its susceptibility. According to this study, the aquifer (water-rich zone) that supplies water to Le-Ax Water District has a high susceptibility to contamination.

This does not mean that the well field will become contaminated, only that the likelihood of contamination is relatively high. This determination is based on the following:

Lack of a protective layer of clay overlaying the aquifer:
Shallow depth (less than 15 feet below ground surface) of the aquifer; and
The presence of significant potential contaminant sources in the protection area

This susceptibility rating means that under current existing conditions, the likelihood of the aquifer becoming contaminated is high. This likelihood can be minimized by implementing appropriate protective measures. More information about the source water assessment or what consumers can do to help protect the aquifer is available by calling Lonny McCulloch or Mike Riley at (740) 593-7502.

Le-Ax Regional Water has developed a Source Water Protection Plan to document the strategies we will implement to protect the aquifer that supplies our drinking water from land-based contamination. Components of the Protection Plan include: contaminant source control strategies, education and outreach strategies, contingency plan update.

What are sources of contamination to drinking water?

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 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.

In order to ensure that tap water is safe to drink, USEPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which 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 Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

Who needs 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 infection. 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 (1-800-426-4791).

About your drinking water.

The EPA requires regular sampling to ensure drinking water safety. The **Le-Ax Regional Water District** conducted sampling for **{bacteria; total trihalomethanes;}** during **2010**. Samples were collected for a total of **500** different contaminants most of which were not detected in the **Le-Ax Regional Water District** water supply. The Ohio EPA requires us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, are more than one year old.

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. **Le-Ax Regional 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 at 800-426-4791 or at <http://www.epa.gov/safewater/lead>.

Table of Detected Contaminants

Listed below is information on those contaminants that were found in the **Le-Ax Regional Water Districts** drinking water.

TABLE OF DETECTED CONTAMINANTS

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
Bacteriological							
Total Coliform 20 per month	0	1	0	n/a	no	2010	Naturally present in the environment
Inorganic Contaminants							
Barium (ppm)	2	2	.022	.022-.022	no	2008	Discharge of drilling waste; discharge from metal refineries; Erosion of natural deposits
Flouride (ppm)	4	4	0.993	.81-1.18	no	2010	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate (ppm)	10	10	.30	.30-.30	no	2010	Runoff from fertilizer use; Leaching from septic tanks, sewers; Erosion of natural deposits
Copper (ppm)	1.3	1.3	.303	0	no	2010	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead (ppb)	0	15	0	0	no	2010	Corrosion of household plumbing systems; erosion of natural deposits
Volatile Organic Contaminants							
Total Trihalomethanes (TTHMSs) (ppb)	n/a	80	39.3	31.4-48.5	no	2010	By-product of water chlorination
Initial Distribution System Evaluation						2009	
SM-1			13.03	4.2-22.2			
SM-2			23	17.7-29.4			
SM-3			32.75	27.1-42.9			
SM-4			34.2	23.1-46.5			
SM-5			24.93	20.9-28.5			
SM-6			25.56	21.8-31.5			
Residual Disinfectants							
Haloacetic Acids (HAA5) (ppb)	n/a	60	12.83	9.5-14.3	no	2010	By-Product of drinking water chlorination
Initial Distribution System Evaluation						2009	
SM-1			0	0			
SM-2			1.8	0.0-7.2			
SM-3			6.93	0.0-10.6			
SM-4			8.78	6.8-10.5			
SM-5			3.5	0.0-7.2			
SM-6			1.78	0.0-7.1			
Chlorine	4	4	1.19	0.32-1.78		2010	Water additive used to control microbes

Important Contact Information

For your convenience Customer Service Representatives are available to respond to your questions and concerns from 8:00 am to 4:00 pm Monday through Friday at 740-594-0123.

Calling after business hours

An answering service is available for emergencies after business hours and weekends at 740-593-7502. This service is for emergencies only. On-call personnel are unable to answer billing questions. Account or billing questions should be conducted during the business hours listed above.

How do I participate in decisions concerning my drinking water?

Public participation and comment are encouraged. The Le-Ax Water District Board of Directors, meet on the second Monday of each month.

Lonny McCulloch, Bruce Hudnall and Mike Riley are E.P.A. certified to run microbiological samples in the Le-Ax laboratory which expedites the lifting of boil advisories when they must be issued

Below are typical results encountered from the water tests:

	<u>Your Water</u>	<u>Maximum Allowable</u>
<u>hardness</u>	130 - 160 ppm (7.6-8.8 gpg)	NA
<u>ph</u>	7.2 - 8.0	NA
<u>free chlorine in distribution system</u>	0.2 - 1.2 ppm	0.2 ppm minimum
<u>iron</u>	0.005 - 0.02 ppm	0.30 ppm
<u>manganese</u>	0.001 - 0.01 ppm	0.05 ppm
<u>alkalinity stability</u>	neutral - slightly depositing	NA
<u>fluoride</u>	0.85 - 1.15 ppm	1.30 ppm
<u>sodium</u>	100 - 125 ppm	NA

Definitions of some terms contained within this report.

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 Contaminant level (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.

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 ($\mu\text{g/L}$) are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of 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.

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 (MRDL): The highest residual disinfectant level allowed.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of residual disinfectant below which there is no known or expected risk to health.

Major Violation

The Le-Ax Water District is required by the E.P.A to make available by April 1st to our satellite systems (systems that buy bulk water from us, The Village of Albany) our Consumer Confidence Information so they can prepare their reports by July 1st.

The Le-Ax Water District did not make this information available until April 23rd of 2010. We have taken steps to insure that this situation does not happen in the future.