

Le-Ax Regional Water District

Drinking Water Consumer Confidence Report

For 2009

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. recently 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.

The Le-Ax Water District in early 2004 began implementing its Wellhead Protection Plan. The Wellhead Protection Plan is intended to present workable strategies for preventing, detecting, and responding to ground water contamination within the ground water source area.

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 **2009**. 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 | 2009 | 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 | 0.997 | .843-1.30 | no | 2009 | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories. |
| Nitrate (ppm) | 10 | 10 | .037 | .037-0.37 | no | 2009 | Runoff from fertilizer use; Leaching from septic tanks, sewers; Erosion of natural deposits |
| Copper (ppm) | 1.3 | 1.3 | 0 | 0 | no | 2007 | Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems |
| | | | | | | | |
| Lead (ppb) | 0 | 15 | 0 | 0 | no | 2007 | Corrosion of household plumbing systems; erosion of natural deposits |
| | | | | | | | |
| Volatile Organic Contaminants | | | | | | | |
| Total Trihalomethanes (TTHMSs) (ppb) Initial Distribution System Evaluation | n/a | 80 | 40.3 | 33.3-44.9 | no | 2009 | By-product of water chlorination |
| 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) (ppm) Initial Distribution System Evaluation | n/a | 60 | 10.3 | 6.0-13.9 | no | 2009 | By-Product of drinking water chlorination |
| 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 | 1.27 | 0.34-1.65 | | No | 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> | 0.5 - 1.2 ppm | 0.2 ppm minimum |
| <u>filtered water turbidity</u> | 0.02 - 0.6 NTU | NA |
| <u>finished water turbidity</u> | 0.01 - 0.10 NTU | NA |
| <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 (µg/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.