



Lehigh County Authority

P.O. Box 3348, 1053 Spruce Street
Allentown, PA 18106-0348

610-398-1444 (8:15 a.m. – 4:45 p.m.)
610-398-2503 (after-hours emergencies)

Water Quality Report

2010—CENTRAL LEHIGH DIVISION

Important! The information contained in this report may be especially important for some groups of people, such as the elderly, people with compromised immune systems and infants (see “A Note from EPA” inside this report). If you received this report, but the water LCA provides is actually provided to tenants, patients, customers or employees who use your property, please make a copy of this report available to them as well. Thank you.

About Your Water System

PWSID (System ID #): 3390073

Service Area: Portions of Upper Macungie, Lower Macungie, Salisbury, South Whitehall, Upper Milford, Weisenberg and Lowhill townships.

Number of Customers:

17,128 residential and commercial properties served.

Water Supply: Eighteen wells located throughout the service area produced an average of 6.7 million gallons per day of groundwater in 2010.

Water Treatment: Water from LCA's wells is disinfected with chlorine to kill bacteria. No other treatment is necessary in order to ensure a safe supply of drinking water.

Dear Valued Customer,

Welcome to Lehigh County Authority's (LCA's) annual water quality report! LCA ensures that your water meets federal and state standards for safe drinking water by completing extensive monitoring for all regulated and some unregulated contaminants.

The details of this monitoring are included in this report. Please take note of the information included about a monitoring violation we faced in October 2010, which has been corrected.

In addition to extensive lab testing for water quality, we continually strive to improve the quality of your water service by completing important projects such as water main replacements, upgrades to treatment systems, enhancements to our automated systems and improvements to customer service procedures. Your input in these and other areas can help us to focus our efforts on issues that will be the most beneficial to our customers.

One of the very best ways to ensure that your water is meeting your high standards for quality is for you to call us whenever there is a problem. As an LCA water customer, you can help us improve water quality just by telling us what you think! Give us a call if your water quality changes, if you have questions, if your water pressure changes, or if you notice any unusual activity at any of LCA's facilities. By letting us know what's going on, we will be able to respond quickly to address your concerns.

In addition, you should be aware that all meetings of LCA's Board of Directors are open to the public, and you can obtain a meeting schedule by visiting our website at www.lehighcountyauthority.org or calling our office.

As you review this report, which contains details about your water system from the 2010 calendar year, I encourage you to contact LCA with any questions you may have. Your feedback will help us to improve future editions of this annual report!

Sincerely,
Aurel Arndt
General Manager

Water Quality Test Results

Contaminant Name	MCL (Maximum Allowed)	MCLG (Goal)	LCA's Water Test Results	Range of LCA's Test Results	Sample Date	Pass or Fail?	Typical Source
Entry Point Disinfectant Residual							
Chlorine (ppm)	MinRDL = 0.40	N/A	Lowest Level Detected = 0.41	0.41 – 1.23	2010	Pass	Water additive used to kill bacteria
Disinfectants & Disinfection By-Products							
Chlorine (as Cl ₂) (ppm)	MaxRDL = 4	MaxRDLG = 4	0.90 highest monthly average	0.67 – 0.90	2010	Pass	Water additive used to kill bacteria
Total Trihalomethanes (ppb)	80	N/A	4.2 running annual average	ND – 16.9	2010	Pass	By-product of water chlorination
Haloacetic Acids (ppb)	60	N/A	1.0 running annual average	ND – 5.2	2010	Pass	By-product of water chlorination
Microbiological Contaminants							
Total Coliform	5% of monthly samples are positive	0	1	0 – 1	2010	Pass	Naturally present in the environment
Inorganic Contaminants							
Copper (ppm)	AL = 1.3	1.3	0.26	All samples were < AL	2010	Pass	Corrosion of household plumbing
Lead (ppb)	AL = 15	0	7	All samples were < AL	2010	Pass	Corrosion of household plumbing
Flouride (ppm)	2	2	0.2	ND – 0.2	2007	Pass	Erosion of natural deposits
Nitrate (ppm)	10	10	8.20	ND – 8.20	2010	Pass	Fertilizer runoff; Leaching from septic tanks
Radioactive Contaminants							
Uranium (ug/L)	30	0	2.3	ND – 2.3	2007	Pass	Erosion of natural deposits
Volatile Organic Contaminants							
Trichloroethylene (ppb)	5	0	0.8	ND – 0.8	2010	Pass	Discharge from metal degreasing factories and other industries
Tetrachloroethylene (ppb)	5	0	0.6	ND – 0.6	2010	Pass	Discharge from metal degreasing factories and other industries

NOTICE: 2010 Monitoring Violation

LCA is required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During the 3rd Quarter of 2010, we did not monitor for Volatile Organic Contaminants (VOCs) at two of our 18 wells that serve your system. Therefore, we cannot be sure of the quality of your drinking water during that time. This monitoring violation occurred due to a clerical error that has been corrected. Immediately upon learning of the violation, the required testing was completed and our system was back in compliance for the 4th Quarter of 2010. Subsequent testing for VOCs showed that your water now meets all federal and state standards for safe drinking water.

What's Not in Your Water?

In addition to the substances shown in this report, LCA tests your water for many other substances which were NOT detected in your water. These tests are routinely conducted according to schedules and procedures outlined in state and federal regulations for safe drinking water.

Substances LCA tests for include:

Microbiological Contaminants (E. coli)	Volatile Organic Contaminants (VOCs)
Disinfection By-Products	Inorganic Contaminants (IOCs)
Radioactive Contaminants	Synthetic Organic Contaminants (SOCs)

With the exception of those listed in the chart above, none of the substances we have tested for have been detected in your drinking water. For detailed information about our water quality monitoring program, please give us a call at any time with your questions.

Other Important Info About Your Water

Nitrate: Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

Lead: 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. LCA 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 (800-426-4791) or at <http://www.epa.gov/safewater/lead>.

Abbreviations & Definitions

MCL:	Maximum Contaminant Level. The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs (definition below) 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.
MinRDL:	Minimum Residual Disinfectant Level. The minimum level of residual disinfectant required at the entry point to the distribution system.
MaxRDL:	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.
MaxRDLG:	Maximum Residual Disinfectant Level Goal. The level of a drinking water disinfectant below which there is no known or expected risk to health. MaxRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.
AL:	Action Level. The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
TT:	Treatment Technique. A required process intended to reduce the level of a contaminant in drinking water.
mg/L:	Milligrams per liter.
NTU:	Nephelometric turbidity units (measure of water's cloudiness)
pCi/L:	Picocuries per liter (a measure of radiation).
ppm:	Parts per million (equal to milligrams per liter).
ppb:	Parts per billion.
ug/L:	Micrograms per liter.
N/A:	Not applicable.
ND:	Not detected.
< :	Less than.
> :	Greater than.

Water Hardness & pH

Water "hardness" is a measure of the mineral content in your water. These minerals, such as calcium and magnesium, are essential to human health and do not need to be removed from your drinking water. However, some customers prefer to remove these minerals with a water softener to avoid mineral deposits on faucets and other fixtures.

Your water hardness, pH & other useful test results:

Hardness	11.3 - 21.4 grains per gallon 194 - 366 ppm
pH	7.3 - 7.9
Iron	0 - 0.13 mg/L
Sodium	0 - 60.8 mg/L
Manganese	0 - 0.02 mg/L
Total Dissolved Solids	220 - 715 mg/L

Hardness Scale:

- 0 - 5 grains per gallon = Soft Water
- 6 - 10 grains per gallon = Moderately Hard Water
- > 11 grains per gallon = Hard Water

If you need more specific results from your residential area in order to make decisions about using a home treatment device, please visit our web site at www.lehighcountyauthority.org or call us at 610-398-1444.

A Note From EPA

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 microbes, organic or inorganic chemicals, pesticides and herbicides or radioactive materials.

In order to ensure that tap water is safe to drink, EPA 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 (800-426-4791).

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 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).

Protecting Your Drinking Water – You Can Help!

The Pennsylvania Department of Environmental Protection (PA-DEP) completed an initial Source Water Assessment of the groundwater wells that supply water to your water system in 2004. An update to this assessment was completed in 2010 through PA-DEP's Source Water Protection Technical Assistance Program. Public meetings will be held in 2011 to review the assessment, and completed reports will be available to LCA, municipalities served by LCA's water systems, and local planning agencies.

The assessment found that LCA's sources of water are located within residential, commercial and industrial areas and, therefore, are susceptible to potential sources of contamination from related activities. Examples include leaking underground storage tanks, wintertime road salt applications and household activities such as lawn fertilizing and improper disposal of household hazardous wastes.

Lehigh County Authority (LCA) is interested in protecting our water supply, and we recognize that our best protection comes from customers, residents and businesses within our service area. That's why we've established a proactive public outreach program to help spread the word, including school education programs, customer newsletters, community programs and a customer advisory panel.

Here are a few ideas about how you can help:

Don't Dump: Anything you put on the ground or down a storm drain can make its way into our groundwater or other water sources. Contact the Lehigh County Office of Solid Waste at 610-799-4177 to find out how to dispose of household hazardous wastes.

Lawn Care: Use only as much fertilizer as your lawn or garden really needs, and be sure to pick up after your pets!

Care for Your Car: Oil spots left on driveways and parking lots can wash away with the rain and will end up back in the environment.

By following these simple guidelines, you can do your part to protect LCA's drinking water.

Este informe contiene informacion muy importante sobre su agua potable. Traduzcalo o hable con alguien que lo entienda bien.

CLD
CENTRAL LEHIGH
DIVISION

IMPORTANT WATER QUALITY
INFORMATION ENCLOSED!
Please pass on to tenants,
patients or employees.

Lehigh County Authority
P.O. Box 3348, 1053 Spruce St.
Allentown, PA 18106-0348

PRSRST STD
US POSTAGE
PAID
Lehigh Valley, PA
Permit No. 129