



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—NORTH WHITEHALL 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 #): 3390055**

**Service Area:** 1,128 customers located in North Whitehall Township in the Orefield, Schnecksville and Neffs villages and vicinity.

**Water Supply:** Five wells plus an interconnection with the Northampton Borough Municipal Authority (NBMA) system, which draws water from the Lehigh River and the Spring Mill Dam. These sources are combined to produce an average of 250,603 gallons per day.

**Water Treatment:** Water from LCA's wells is disinfected with chlorine to kill bacteria and treated to reduce the manganese that is naturally occurring in this area. NBMA's water is treated and fluoridated at a surface water filtration and treatment plant. For more information about NBMA's treatment methods and supply, please call 610-262-6711.

Dear Valued Customer,

Welcome to Lehigh County Authority's (LCA's) annual water quality report! We are pleased to report that your drinking water met all federal and state standards for safety in 2010. LCA ensures that your water is safe to drink by completing extensive monitoring for all regulated and some unregulated contaminants. The details of this monitoring are included in this report.

In addition to this monitoring, 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](http://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
<b>Microbiological Contaminants</b>							
Turbidity (NTU)	$\frac{TT = 5}{TT =}$ percentage of samples < 0.3	0	$\frac{0.088}{100\%}$	N/A	2010	Pass	Measure of water's cloudiness, caused by soil runoff
<b>Disinfectants &amp; Disinfection By-Products</b>							
Chlorine (as Cl <sub>2</sub> ) (ppm)	MaxRDL = 4	MaxRDLG = 4	1.02	0.62 – 1.02	2010	Pass	Water additive used to kill bacteria
Haloacetic Acids (ppb)	60	N/A	8.6 <i>running annual average</i>	ND – 22.5	2010	Pass	By-product of water chlorination
Total Trihalomethanes (ppb)	80	N/A	12.2 <i>running annual average</i>	ND – 32.7	2010	Pass	By-product of water chlorination
<b>Inorganic Contaminants</b>							
Copper (ppm)	AL = 1.3	1.3	0.54	All samples were < AL	2010	Pass	Corrosion of household plumbing
Nitrate (ppm)	10	10	4.70	1.1 – 4.70	2010	Pass	Fertilizer runoff; Leaching from septic tanks

## What Does This Chart Mean?

This chart (above) shows only those substances that were detected in your water. All of them "passed" because they fall within acceptable limits for health and safety as determined by state and federal regulations. These regulations are put in place to protect the public's health, and we are pleased to show that our water met these standards in 2010.

## Other Important Info About Your Water

In addition to the substances shown in this report, LCA and NBMA test 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. For detailed information about our water quality monitoring program, please give us a call at any time with your questions.

**Fluoride:** Fluoride levels in LCA's water will vary throughout the system depending on your location due to the blending of LCA's well water with NBMA's fluoridated water. You can obtain specific fluoride test results for your area by visiting our web site at [www.lehighcountyauthority.org](http://www.lehighcountyauthority.org) or calling our office.

**Cryptosporidium:** Cryptosporidium is a microbial parasite commonly found in surface water, and NBMA has monitored for it in both the source water and treated water prior to distribution to customers. NBMA's monitoring concludes that Cryptosporidium is present in the river source, but is not detected in their finished water. At present, there is no evidence that customers should be concerned with Cryptosporidium. Customers should be aware that cryptosporidium is capable of causing a disease called cryptosporidiosis. Symptoms include diarrhea, abdominal cramping and nausea. Healthy individuals usually overcome the illness in a few weeks. However, immuno-compromised individuals are at greater risk of developing serious, chronic illness. These people should consult a physician to discuss precautions to avoid infection. Cryptosporidium must be ingested to develop disease, and it may be spread through means other than drinking 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

<b>MCL:</b>	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.
<b>MCLG:</b>	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.
<b>MinRDL:</b>	Minimum Residual Disinfectant Level. The minimum level of residual disinfectant required at the entry point to the distribution system.
<b>MaxRDL:</b>	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.
<b>MaxRDLG:</b>	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.
<b>AL:</b>	Action Level. The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
<b>TT:</b>	Treatment Technique. A required process intended to reduce the level of a contaminant in drinking water.
<b>mg/L:</b>	Milligrams per liter.
<b>NTU:</b>	Nephelometric turbidity units (measure of water's cloudiness)
<b>pCi/L:</b>	Picocuries per liter (a measure of radiation).
<b>ppm:</b>	Parts per million (equal to milligrams per liter).
<b>ppb:</b>	Parts per billion.
<b>ug/L:</b>	Micrograms per liter.
<b>N/A:</b>	Not applicable.
<b>ND:</b>	Not detected.
<b>&lt; :</b>	Less than.
<b>&gt; :</b>	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:

<b>Hardness</b>	3.0 - 16.6 grains per gallon 51 - 284 ppm
<b>pH</b>	6.5 - 7.4
<b>Iron</b>	0 - 0.06 mg/L
<b>Sodium</b>	15.1 - 51.6 ppm
<b>Manganese</b>	0 - 0.36 mg/L
<b>Total Dissolved Solids</b>	96 - 484 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](http://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 a Source Water Assessment of the groundwater wells that supply water to your water system in 2004.

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.

Public meetings were held in 2005 to review the assessment, and completed reports were distributed to LCA, municipalities served by LCA's water systems, and local planning agencies. A summary of the report is available by contacting LCA, and additional information is available on the PA-DEP web site at [www.dep.state.pa.us](http://www.dep.state.pa.us) (Click on "Water" and then "Watershed Management").

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.*

**NWD**  
**NORTH WHITEHALL**  
**DIVISION**

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

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