

# Lower Saucon Authority

3706 Old Philadelphia Pike

Bethlehem, PA 18015-5426

<http://www.lowersauconauthority.org>

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## LOWER SAUCON AUTHORITY 2009 ANNUAL CONSUMER REPORT ON THE QUALITY OF TAP WATER JUNE 2010

The water supplied by the Lower Saucon Authority meets or exceeds all federal (EPA) and state (DEP) drinking water standards. This report is a summary of the tests conducted during calendar year 2009 by both the Authority and our supplier, the City of Bethlehem. No violations of water quality standards occurred during the year.

*Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, ó hable con alguien que lo entienda.*

### Special Additional Health Information

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 and the Centers for Disease Control and Prevention (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 at 1-800-426-4791.

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 Lower Saucon Authority 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 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.

### General Water System Information

The Lower Saucon Authority owns and operates a water distribution system serving portions of Lower Saucon Township, Northampton County, and limited parts of the Borough of Fountain Hill, Lehigh County. The system operates under a permit issued by the PA Department of Environmental Protection, PWS #3480027. The address to contact the Authority is noted above. The Authority's Administrator is Gar W. Davidson. Regular business hours are Monday through Friday, 8:00 AM to 4:00 PM. Regular meetings of the Authority Board are held on the third Tuesday of each month, at 7:00 PM, in the Authority offices, and are open to the public. Our phone number is 610-317-3212; the fax number is 610-317-3216. **In the event of an after-hours emergency please call the Northampton County Control Center at 610-759-2200.**

The Authority has a website at <http://www.lowersauconauthority.org> which contains information about the Authority, current activities, meter reading, water conservation tips and links to related sites (DEP, EPA, DCNR, local government, etc.) as well as a copy of this CCR. We can be reached by e-mail at [administrator@lowersauconauthority.org](mailto:administrator@lowersauconauthority.org).

**The Authority uses an automated phone messaging system (OneCallNow) to notify customers in advance of planned service disruptions (for example, hydrant flushing, etc.) as well as emergencies (e.g. a boil water advisory resulting from a major main break). Customers should make sure that the Authority has a current phone number on file to reach them if needed. We do not share this information with third parties.**

### **Source(s) of Water**

All water distributed by the Lower Saucon Authority comes from the City of Bethlehem water system. There are no connections between the Lower Saucon Authority system and any other water system source, other than the City of Bethlehem. The Bethlehem systems' water comes entirely from surface sources, namely the Wild Creek Reservoir, Towamensing Township, Carbon County, in a watershed that covers 22 square miles and the Penn Forest Reservoir, Penn Forest Township, Carbon County and Polk Township, Monroe County, in a watershed that covers 17 square miles. This primary water supply is located 22 miles north of the City. The Tunkhannock Creek, Tunkhannock Township, Monroe County, provides a supplemental supply to the Penn Forest Reservoir. More information about the City's water system is available on the web at <http://www.bethlehem-pa.gov>.

The City of Bethlehem has conducted Source Water Assessments for these supplies, which are available from the Pennsylvania Department of Environmental Protection Northeast Regional Office, Records Management Unit, at (570)-826-5472. Also, summary reports are available at the PA DEP website at [www.depweb.state.pa.us](http://www.depweb.state.pa.us) (directLINK "source water").

### **Contaminants in Drinking Water**

**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. Food and Drug Administration (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, at 1-800-426-4791, or on the World Wide Web at <http://www.epa.gov/safewater/hfacts.html>. The Pennsylvania Department of Environmental Protection also maintains an excellent website at <http://www.depweb.state.pa.us>

**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 before it is treated include:

- *Microbial contaminants*, such as viruses and bacteria, which may come from septic systems, agricultural livestock operations and wildlife.
- *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.
- *Pesticides and herbicides*, which may come from a variety of sources such as agriculture, storm water runoff, and residential uses.
- *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.
- *Radioactive contaminants*, which are naturally occurring.

## Water Quality Data for Calendar Year 2009

The following water quality data table lists all the contaminants that were detected during monitoring for the 2009 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented is from testing done from January 1 – December 31, 2009. The DEP requires less frequent testing for certain contaminants, where the levels are not likely to vary significantly from year to year. Definitions of the terms and abbreviations used in the table are given below:

- **AL: Action Level**, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- **MCL: Maximum Contaminant Level**, or 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.
- **MCLG: Maximum Contaminant Level Goal**, or the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for an extra margin of safety.
- **MRDL: Maximum Residual Disinfectant Level**, The highest level of a disinfectant (such as chlorine) allowed in drinking water. Addition of a disinfectant is necessary for control of microbiological contaminants.
- **MRDLG: Maximum Residual Disinfectant Level Goal**, The level of a drinking water disinfectant below which there is no known or expected health risks. MRDLG's do not reflect the benefits of the use of disinfectants to control microbiological contaminants.
- **mrem/year: millirem per year** (a measure of radiation absorbed by the body).
- **ppm: Parts per million or milligrams per liter.** (1:1,000,000)
- **ppb: Parts per billion** (1:1,000,000,000), or micrograms/liter (µg/l)
- **NA: Not applicable.**
- **pCi/l: Picocuries per liter** (a measure of radioactivity).
- **TT: Treatment Technique**, A required process intended to reduce the level of a contaminant in drinking water. For turbidity this means any monthly sample greater than 1 NTU's or 95% of the monthly samples are ≥ 0.3 NTU's

### W A T E R   Q U A L I T Y   D A T A

Inorganic Contaminants	ML	MCLG	Detected Level	Range of Detection	Sampled By	Violation	Major Sources
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Fluoride <sup>1</sup> (ppm)	4	4	1.0	NA	City	NO	Additive to promote strong teeth.
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Organic Contaminants	MCL	MCLG	Detected Level	Range of Detection	Sampled By	Violation	Major Sources
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Total Trihalomethanes (TTHMs) (ppb)	80	0	56.55	38.6 – 66.4	LSA	NO	By-product of drinking water chlorination
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Five Haloacetic Acids (HAA5) (ppb)	60	NA	18.75	2.0 – 26.0	LSA	NO	By-product of drinking water chlorination
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Microbiological Contaminants	MCL	MCLG	Highest % of positive samples collected in any mo.	Sampled By	Violation	Typical Source(s) of Contaminant
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Total Coliform	Presence of Coliform in >5% of monthly samples	0	0.00	LSA	NO	Naturally present in the environment.
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<b>Lead and Copper</b>	<b>AL</b>	<b>MCLG</b>	<b>Detected Level</b>	<b># of sites found above AL</b>	<b>Sampled By</b>	<b>Violation</b>	<b>Typical Source(s) of Contaminant</b>
<b>Lead (ppb)</b>	<b>AL=15</b>	<b>0</b>	<b>&lt;5</b>	<b>0 out of 20</b>	<b>LSA, 2007</b>	<b>NO</b>	<b>Corrosion of household plumbing</b>
<b>Copper (ppm)</b>	<b>AL=1.3</b>	<b>1.3</b>	<b>0.087</b>	<b>0 out of 20</b>	<b>LSA, 2007</b>	<b>NO</b>	<b>Corrosion of household plumbing</b>

<b>Performance Monitoring</b>	<b>MRDL</b>	<b>MRDLG</b>	<b>Detected Level</b>	<b>Range of Detections</b>	<b>Sampled By</b>	<b>Violation</b>	<b>Typical Source(s) of Contaminant</b>
<b>Disinfectant Residual (ppm)</b>	<b>4</b>	<b>4</b>	<b>0.28</b>	<b>0.02-1.04</b>	<b>LSA</b>	<b>NO</b>	<b>Product of drinking water chlorination.</b>

<b>Performance Monitoring</b>	<b>Units</b>	<b>MCL</b>	<b>Detected Level</b>	<b>Lowest Monthly % of samples meeting TT</b>	<b>City</b>	<b>Violation</b>	<b>Soil runoff.</b>
<b>Turbidity <sup>2</sup> (NTU)</b>	<b>TT</b>	<b>NA</b>	<b>0.090</b>	<b>100</b>	<b>City</b>	<b>NO</b>	<b>Soil runoff.</b>

<b>Radiologicals</b>	<b>MCL</b>	<b>MCLG</b>	<b>Detected Level</b>	<b>Range of Detection's</b>	<b>Sampled By</b>	<b>Violation</b>	<b>Typical Source(s) of Contaminant</b>
<b>Beta/Photon Emitters<sup>3</sup> (mrem/yr)</b>	<b>4</b>	<b>0</b>	<b>0.37</b>	<b>NA</b>	<b>City, 2003</b>	<b>NO</b>	<b>Decay of natural &amp; manmade deposits</b>
<b>Combined Radium (pCi/L)</b>	<b>5</b>	<b>0</b>	<b>1.6</b>	<b>NA</b>	<b>City, 2003</b>	<b>NO</b>	<b>Erosion of natural deposits</b>

**Footnotes**

1. The City of Bethlehem has been adding fluoride to their drinking water since June 1971.
2. Turbidity is a measure of the cloudiness of the water. It is monitored by the City because it is a good indicator of the effectiveness of their filtration system.
3. Strontium 90 was detected at 0.30 pCi/L and Tritium was detected at 1100 pCi/L. These two results combined are put into a formula to determine the mrem/year value listed above. Data collected from 2003.

Additional copies of this report are available at the Authority office and on our website. Lower Saucon Authority would appreciate it if large volume water customers such as landlords, employers, and commercial establishments open to the public post extra copies of these reports in conspicuous locations or distribute them to your tenants, residents, patients, students, and/or employees. This action will allow non-customers who consume the water LSA delivers, but are not billed as customers, to learn about our water system.