2010 Annual Drinking Water Quality Report

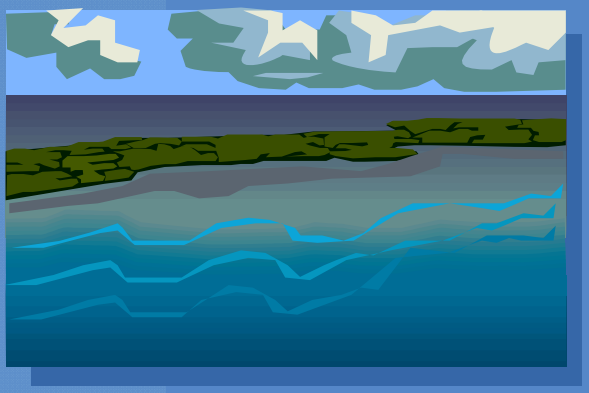
City of Allentown

Water Filtration Plant
1300 Martin Luther King Jr. Drive
Allentown, PA 18102
(610) 437-7643
(610) 437-8712 (fax)
PWSID#3390024
www.allentownpa.gov
Ed Pawlowski, Mayor

The City of Allentown, Bureau of Water Resources, is pleased to present the 2010 Annual Drinking Water Quality Report. This report is a snapshot of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to federal and state standards. Our staff is committed to providing the city's residents and municipal customers with drinking water that is safe and of high quality. We achieve this goal by meeting or exceeding standards set by the Environmental Protection Agency (EPA) and the PA Department of Environmental Protection (PADEP). Once again we are proud to report that our system has met all standards. We remain committed to ensuring the quality of your water.

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

Source Water Information

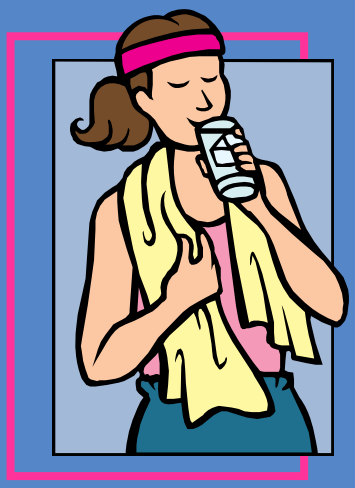


The Water Filtration Plant treats up to 30 million gallons per day from two surface water sources, the Little Lehigh Creek and Lehigh River, and two ground water sources, Schantz and Crystal Springs. PADEP Source Water Assessments were conducted in 2004. Our water supply is at high risk from pollution which may potentially originate from commercial and industrial sources. The Lehigh River, our back-up supply, was found to be at moderate risk from pollution potentially contributed by roads, residential developments, run-off from strip mines, etc. The assessments can be viewed at www.elibrary.dep.state.pa.us or are available upon request.

In order to help protect its 98 square mile watershed, the City has developed a source water protection plan. The PADEP commended this proactive measure as a means to help ensure the quality of our community's drinking water. Allentown's park system was also praised as one of our most important source water protection strategies. The stretches of land surrounding the Little Lehigh and Cedar Creek act as a buffer to pollution activities. Future efforts are being planned by the bureau's staff to further help protect our watershed. Additionally, our laboratory and the RSVP group (Retired and Senior Volunteer Program) routinely monitor local streams in order to ensure the safety of your drinking water.

The City of Allentown has been a member of the Partnership for Safe Water since 2005. The Partnership is a voluntary cooperative effort between the EPA, American Water Works Association (AWWA) and other drinking water organizations. The goal of this common sense cooperation is to provide a new measure of safety to millions of Americans by implementing prevention programs where legislation or regulation does not exist. The preventative measures are based around optimizing treatment plant performance and thus increasing protection against microbial contamination in your drinking water supply.

Water & Health



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 human activity. Contaminants that may be present in source water include:

- **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- **Inorganic contaminants**, such as salts and metals, which can be naturally-occurring or result from urban stormwater run-off, 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, urban stormwater run-off 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 stormwater run-off and septic systems.
- **Radioactive contaminants**, which can be naturally-occurring or the result of oil and gas production and mining activities.

In order to assure that tap water is safe to drink, EPA and DEP prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. FDA and DEP 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

A MESSAGE FROM THE EPA 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.

Additional Monitoring

CRYPTOSPORIDIUM Allentown has been monitoring the Lehigh River for the microbial pathogen, Cryptosporidium, since March of 2009 and will continue to do so until March of 2011. Only two detects have been found in 23 samples. Monitoring of the Little Lehigh Creek was conducted between 2004 and 2006. Two detects were present in 24 samples.

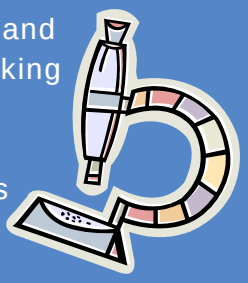
Cryptosporidium must be ingested to cause disease, and it may be spread by means other than drinking water. Ingestion of Cryptosporidium may cause an abdominal infection with symptoms including nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people are at greater risk of developing a life-threatening illness. We encourage immuno-compromised individuals to consult with their doctor regarding appropriate precautions to take to in order to avoid infection.

LEAD In June of 2010, water sampled from the homes of 50 residents was tested for the presence of lead and copper. Results met federal and state standards. 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 City of Allentown 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 right), or at www.epa.gov/safewater/lead.

EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Monitoring Your Water

We routinely monitor for contaminants in your drinking water according to federal and state laws. The presence of a contaminant does not necessarily mean that your drinking water poses a health threat. The following tables show the results of our monitoring from January 1st to December 31st, 2010. The state allows us to monitor for some contaminants less than once per year because the concentrations of these chemicals do not change frequently. Data collected in prior years is noted on the tables.



DEFINITIONS

AL	**ACTION LEVEL: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.**
MCL	**MAXIMUM CONTAMINANT LEVEL: 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: 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 RESIDUALDISINFECTANT LEVEL: The minimum level of residual disinfectant required at the entry point to the distribution system.**
MRDL	**MAXIMUM RESIDUAL DISINFECTANT LEVEL: The highest level of disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants.**
MRDLG	**MAXIMUM RESIDUAL DISINFECTANT LEVEL GOAL: The level of a 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 contamination.**
NA	**NOT APPLICABLE: Results or information does not apply.**
NTU	**NEPHELOMETRIC TURBIDITY UNIT: A measure of water clarity.**
ppm or mg/L	**PARTS PER MILLION or MILLIGRAMS PER LITER: One part per million corresponds to one penny in $10,000.**
ppb or µg/L	**PARTS PER BILLION or MICROGRAMS PER LITER: One part per billion corresponds to one penny in $10,000,000.**
TT	**TREATMENT TECHNIQUE: A required process intended to reduce the level of contamination in drinking water.**

Table 1. Average Results of Typical and Secondary Contaminant Analyses of Water Plant Discharge

Contaminant	Units	MCL	Your Water	Sources
Alkalinity	ppm as CaCO3	> 55	176	These contaminants are
Aluminum	ppm	0.2	0.063	associated with the aesthetic
Chloride	ppm	250	69	qualities of drinking water.
Color	Color Units	15	0.3	
Corrosivity	Langelier Index	Non-corrosive	0.07	You would be able to notice
pH	SU	> 7.2	7.61	a change in color, smell or
Silver	ppm	0.1	0.0005	taste if a secondary standard
Sodium	ppm		35	MCL was exceeded.
Sulfate	ppm	250	40	
Total Dissolved Solids	ppm	500	390	Non-detectable results:
Total Hardness	grains per gallon		14.2*	Foaming Agents, Iron &
Zinc	ppm	5	0.0009	Manganese

* This result is the answer to our most frequently asked question. It is used for home softener programming.

Table 2. Detection Summary of Regulated Contaminants

Contaminant	MCLG/ MRDLG	MCL, TT MRDL, AL	Your Water	Range of Detects	Violation	Sources
Organic & Inorganic Contaminants						
Fluoride (ppm)	2	2	0.77	0.65 - 0.92	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer & aluminum factories
Haloacetic Acids (ppb)	NA	60	12.9	2.6 - 21.2	No	By-product of drinking water chlorination
Nitrate (ppm)	10	10	4.1	3.5 - 4.6	No	Run-off from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Tetrachloroethylene (ppm)	0	5	1.31	NA 1 sample tested	No	Discharge from factories and dry cleaners
Total Trihalomethanes (ppb)	NA	80	29.1	4.13 - 37.24	No	By-product of drinking water chlorination
Unregulated Contaminants						
Metolachlor ethane sulfonic acid (ppb) (January 2009)	NA	NA	0.40	0.37 - 0.44	No	Acetanilide degradate Monitoring required per EPA; state limits considered
Lead & Copper						
Lead (ppb) (June 2010)	0	15	90th Percentile 8.8	# Sites Above AL 1 of 50	No	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm) (June 2010)	1.3	1.3	90th Percentile 0.265	# Sites Above AL 0 of 50	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Chlorine (ppm)						
Distribution System	4	4	0.70	0.07 - 1.08	No	Water additive used to control microbes
Entry Points	MinRDL = 0.2		Minimum 0.54	0.54 - 1.24		
Microbiological Contaminants						
Total Coliform Bacteria	0	5% of monthly Samples	Highest % positives in any one month <1%		No	Naturally present in the environment
Turbidity						
Turbidity (NTU)	0	1 for single reading		0.053	No	Soil run-off
Highest single reading (April 2010)		TT = at least 95% of monthly samples <0.3 NTU		100%		Used as an indicator of filter performance.

If you have any questions regarding this report, please contact the Laboratories Manager at 610-437-7682. Thank you.

Public Input & Information

- We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future. Please help us to protect our most valuable natural resource by reporting any pollution activity evident in the watershed or storm sewer system to:

  911 if the action is in progress,
  610-437-7643 upon suspicion, or
  610-437-7751 for non-emergencies on weekends, evenings, and holidays.

- The City of Allentown has implemented a Public Notification System that is able to deliver alerts to city residents during emergency situations, such as boil water emergencies or evacuations. Quick dissemination of information is important for public safety. In order to register an unlisted phone number, cell phone number, or e-mail address, visit the city's website at www.allentownpa.gov and click on the Emergency Notification Sign Up link or call 1-866-484-3264. (City residents with listed landline phone numbers do not need to register). Text message alerts may also be sent. Registration only takes a few minutes and could provide valuable information for you and your family.

- Held on the first and third Wednesday of each month, City Council meetings begin at 7:30 p.m. in the Council Chambers of City Hall. The meetings allow for the public to voice any concerns they may have pertaining to our water system. Council Chambers are handicap accessible.

ABOUT THE BUREAU OF WATER RESOURCES

- The Water Filtration Plant is staffed by state certified operators who work around the clock to ensure your safety. Recognized for the 3rd year in a row, our facility has been awarded the prestigious Area Wide Optimization Award and ranks as one of the top 20 in the state. Its processes are working at maximum efficiency in order to eliminate pathogens and contaminants from your drinking water.
- Our laboratories are accredited by the PADEP under the Environmental Laboratory Accreditation Act.
- OUR MEMBERSHIPS- Partnership for Safe Water, American Water Association Research Foundation (AWARF), Lehigh Valley Water Suppliers (LVWS), American Water Works Association (AWWA), Pennsylvania Association of Accredited Environmental Laboratories (PaAAEL), Pennsylvania Water Environmental Association (PWEA), Water Works Operators' Association of Pennsylvania (WWOAP), American Public Works Association (APWA), and Water Environment Federation (WEF).

Allentown
City without limits.