

Hanover Township Lehigh County
{PWSID# 3390097}

Hanover Township, Lehigh County is again pleased to present this year's Consumer Confidence Report. This Report is designed to inform you about the quality of water and services we deliver to you every day and shows our updated information (charts). Our constant goal is to provide you with a safe and dependable supply of drinking water.

We are committed to ensuring the quality of our water. Hanover Township obtains its water from

Lehigh County Authority and is pleased to report the drinking water has never violated a maximum contaminant level and has met all EPA and State water health standards. All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or man made. The constituents can be microbes, organics or inorganic chemicals, or radioactive materials. All

drinking water, including bottled water, can 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 Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

THE EPA HAS DETERMINED THAT YOUR WATER HAS MET ALL EPA AND STATE STANDARDS.

{SEE ATTACHED TABLES #1 AND #2}

Being that the MCL's are set at very stringent levels, we have learned through monitoring and testing some constituents have been detected. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Hanover Township, Lehigh County had ONE violation in 2016. This violation was minor in nature and occurred when the October Haloacetic Acids sample was taken from a different site than what was registered. The test was re-taken and the results fell within the standards.

Please call our office (610-264-1069) Monday –Friday 8 a.m. to 4 p.m. {Attention: Jeffry A. Mouer} if you have any questions. The Township Council meets on the 1st and 3rd Wednesday at the Township Building, 2202 Grove Rd, Allentown PA 18109 at 7:30 P.M. Help us protect our water sources, which are the heart of the community, our way of life and our children's future. Lehigh County Authority encourages the public to call our water filtration facility and arrange a tour. Additional information about Allentown and other Lehigh Valley water suppliers can be found at the following web address: <http://www.lvwater.org> community, our way of life and our children's future. Additional information about Allentown and other Lehigh Valley water suppliers can be found at the following web address: <http://www.lvwater.org>.

Additional copies of the CCR can be obtained by visiting <http://www.hanleco.org>.

Some people may be more vulnerable to contaminant 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 systems disorders, some elderly, and infants, can be particularly at risk from infections.

These people should seek health care 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 microbiological 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. Hanover Township 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 or <http://www.epa.gov/safewater/lead>

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:

- 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 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, urban storm water runoff and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems.
- 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, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

The following, you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms, we've provided the following definitions:

Non-detects (ND) – Lab analysis indicates the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/l) – one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter – one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Action level (A.L.) – the concentration of a contaminant that, if exceeded, triggers treatment or other requirements, which a water system must follow.

Maximum Contaminant Level - The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminate Level Goal – The "goal" MCLG is 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 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 Goal (MRDLG) – The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants

NTU: Nephelometric turbidity units (measure of water's cloudiness)

For each regulated constituent that is detected, or is an MCL or treatment technique (TT) violation, or is an action level exceedance (AL), the level detected, unit of measurement, the MCLG, the MCL and the likely source of contamination is REQUIRED to be reported in the test result tables.

Table's #1 and #2 list all contaminates whose results were above the detection limits of the analytical method which Hanover Township, Lehigh County samples. All other testing is done by the Lehigh County Authority. All results for contaminates below the detection level are not listed.

**OWNERS OF MULTIPLE FAMILY DWELLINGS, COMMERCIAL BUSINESSES, PUBLIC HOUSING, OR SIMILAR SITUATIONS ARE ENCOURAGED TO POST AND/OR DISTRIBUTE THIS REPORT.
ADDITIONAL COPIES ARE AVAILABLE FROM THIS OFFICE.**

DETECTION SUMMARY OF REGULATED CONTAMINANTS

TABLE #1

<u>Lead & Copper Rule Compliance Monitoring</u>	<u>Units</u>	<u>A.L.</u>	<u>MCLG</u>	<u>90th Percentile</u>	<u># of Sites Above A.L.</u>	<u>Violation</u>	<u>Likely Source of Contamination</u>
Lead (Collected in 2016 next testing required in 2019)	ppb	15	0	3.2	0 out of 10	No	Corrosion of household plumbing systems
Copper (Collected in 2016 next testing required in 2019)	ppm	1.3	0	.2	0 out of 10	No	Corrosion of household plumbing systems

TABLE #2

<u>CONTAMINANT</u>	<u>Units</u>	<u>MCL</u>	<u>MCLG</u>	<u>Detected Level</u>	<u>Range of Detects</u>	<u>Violation</u>	<u>Likely Source of Contamination</u>
Trihalomethanes	ppb	80	NA	39	N/A	NO	By-product of drinking water chlorination
Haloacetic Acids	ppb	60	NA	21	4-21	NO	By-product of drinking Water chlorination
Chlorine	ppm	4	4	.40	0.20-0.84	NO	Water additive used to control microbes

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

INFORMATION FROM LEHIGH COUNTY AUTHORITY (ALLENTOWN WATER SYSTEM)

The information in this report 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 2016!

Water Quality Test Results

Chemical Contaminants

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
Chlorine (as Cl ₂) (ppm)	MaxRDL = 4	MaxRDLG = 4	0.87	0.68 – 0.87	2017	Pass	Water additive used to kill bacteria
Total Trihalomethanes (ppb)	80	N/A	39 (running annual average)	6.2 – 50.4	2017	Pass	By-product of water chlorination
Haloacetic Acids (ppb)	60	N/A	21 (running annual average)	4.9 – 31.1	2017	Pass	By-product of water chlorination
Barium (ppm)	2	2	0.036	0.035 – 0.036	2017	Pass	Erosion of natural deposits
Chromium (ppb)	100	100	3	2 – 3	2017	Pass	Erosion of natural deposits; discharge from steel and pulp mills

Water Quality Test Results

Chemical Contaminants (cont'd)

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
Nitrate (ppm)	10	10	3.46	3.09 – 3.46	2017	Pass	Fertilizer runoff; Leaching from septic tanks
Fluoride (ppm)*	2	2	0.45	0.43 – 0.45	2017	Pass	Water additive which promotes strong teeth
Combined Radium (pCi/l)	5	0	2.2	1.4 - 2.2	2014	Pass	Erosion of natural deposits

* *Fluoride: LCA adds fluoride to its drinking water as a requirement of the lease of the water system from the City of Allentown. LCA's water typically contains fluoride levels between 0.5 and 0.6 ppm to promote strong teeth. Test results shown above were a result of specific monitoring completed to meet regulatory reporting requirements.*

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Water Quality Test Results

Other Contaminants

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
Turbidity (NTU)	$\frac{TT = 1}{TT = \text{at least 95\% of monthly samples} \leq 0.3 \text{ NTU}}$	0	$\frac{0.11}{100\%}$	N/A	2017	Pass	Measure of water cloudiness, caused by soil runoff. An indicator of filter performance

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Water Quality Test Results

Entry Point Disinfectant Residual

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
Chlorine (as Cl ₂) (ppm)	MinRDL = Not less than 0.40 for more than 4 hours	N/A	Lowest Detected Level = 0.36	0.36 – 1.09	2017	Pass	Water additive used to kill bacteria

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Water Quality Test Results

Lead & Copper Testing

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
Copper (ppm)	AL = 1.3	1.3	0.24	All samples were < AL	2016	Pass	Corrosion of household plumbing
Lead (ppb)	AL = 15	0	9	1 out of 50 samples were > AL	2016	Pass	Corrosion of household plumbing

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Water Quality Test Results

Unregulated Contaminant Monitoring

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

Contaminant Name	Reported Level (Average)	Range of Results
Hexavalent chromium (ppb)	0.64	0.39 – 0.91
Chlorate (ppb)	143	53 – 270
Strontium (ppb)	141	100 – 201
Vanadium (ppb)	0.13	0 – 0.25
1,4-dioxane (ppb)	0.07	0 – 0.11

All results are from the 2015 Unregulated Contaminant Monitoring Rule 3 (UCMR3) testing.