CONSUMER CONFIDENCE REPORT 2021

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 contaminates. The presence of contaminates does not necessarily indicate that the water poses a health risk. More information about contaminates 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}

The MCL's are set at very stringent levels. Some contaminants have been detected through monitoring and testing. Your drinking water is safe as shown in the attached tables. Hanover Township, Lehigh County had one violation in 2020. The weekly chlorine sample was late the week of April 12th.

Please call our office (610-264-1069) Monday – Friday 8:30 a.m. to 4 p.m. {Attention: Josef A. Fragnito} 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 contact our water filtration facility to arrange a tour. Additional information 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 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 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 contaminates 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 by-products of industrial processes and petroleum production, 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.

Following are some terms and abbreviations you may 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

Lead & Copper Rule Compliance Monitoring	**Units**	**A.L.**	**MCLG**	**90th Percentile**	**# of Sites Above A.L.**	**Violation**	**Likely Source of Contamination**
Lead (Collected in 2019 next testing required in 2022)	ppb	15	0	7.59	0 out of 10	No	Corrosion of household plumbing systems
Copper (Collected in 2019 next testing required in 2022)	ppm	1.3	0	0.091	0 out of 10	No	Corrosion of household plumbing systems

TABLE #2

CONTAMINANT	**Units**	**MCL**	**MCLG**	**Detected Level**	**Range of Detects**	**Violation**	**Likely Source of Contamination**
Trihalomethanes	ppb	80	NA	28.5	N/A	NO	By-product of drinking water chlorination
Haloacetic Acids	ppb	60	NA	18.1	N/A	NO	By-product of drinking Water chlorination
Chlorine	ppm	4[1]	4[2]	0.68	0.20-0.68	NO	Water additive used to control microbes

Footnote: [1] MRDL [2]MRDLG

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)

Water Quality Test Results

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.
< or >	< = Less than. > = Greater than. 6

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 Cl2) (ppm)	MinRDL = Not less than 0.40 for more than 4 hours	N/A	Lowest Detected Level = 0.35	0.35 – 1.18	2021	Pass	Water additive used to kill bacteria

7

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 Cl2) (ppm)	MaxRDL = 4	MaxRDLG = 4	0.91	0.75 – 0.91	2021	Pass	Water additive used to kill bacteria
Total Trihalomethanes (ppb)	80	N/A	29.4 (running annual average)	10.4 – 34.6	2021	Pass	By-product of water chlorination
Haloacetic Acids (ppb)	60	N/A	16.1 (running annual average)	5.90 – 20.7	2021	Pass	By-product of water chlorination
Barium (ppm)	2	2	0.052	0.031 – 0.052	2021	Pass	Erosion of natural deposits
Chromium (ppb)	100	100	4.8	ND – 4.8	2021	Pass	Erosion of natural deposits; discharge from steel and pulp mills

8

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	5.0	3.2 – 5.0	2021	Pass	Fertilizer runoff; Leaching from septic tanks
Fluoride (ppm)*	2	2	0.64	0.48 – 0.64	2021	Pass	Water additive which promotes strong teeth
Asbestos (MFL)	7	7	0.17	ND – 0.17	2021	Pass	Decay of asbestos cement water mains; Erosion of natural deposits
Tetrachloroethylene (ppb)	5	0	3.4	ND – 3.4	2021	Pass	Discharge from factories and dry cleaners

** 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.*

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	0.157	All samples were < AL	2019	Pass	Corrosion of household plumbing
Lead (ppb)	AL = 15	0	6	1 out of 50 samples were > AL	2019	Pass	Corrosion of household plumbing

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)	TT = 1 TT = at least 95% of monthly samples ≤ 0.3 NTU	0	0.052 100%	N/A	2021	Pass	Measure of water cloudiness, caused by soil runoff. An indicator of filter performance

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
Manganese (ppb)	0.49	ND - 0.885
HAA6Br (ppb)	8.55	5.87 – 15.15
HAA9 (ppb)	18.32	11.64 – 31.12

All results are from the 2018-2020 Unregulated Contaminant Monitoring Rule 4 (UCMR4) testing.