

The Village of Hesperia 2021 Annual Water Quality Report June 24, 2022

We are pleased to present the you this year's Annual Drinking Water Quality Report. The Village of Hesperia is proud of the fine drinking water it provides. This annual water quality report shows the source of our water, lists the results of our tests, and contains much important information about water and health. This report shows the results of our monitoring for the period of January 1st to December 31st of 2021.

Is our water safe to drink?

We are pleased to report that our drinking water is safe and meets all EPA and EGLE standards for drinking water.

If you have any questions about this report and/or concerning your water utility, please contact your licensed water operator Mike Stanaway at 231-854-1821 or if you want to learn more, please attend the regularly scheduled Village meetings. The meetings are held every second Monday of the month at 7:30 pm. and are held at the Village Hall, 33 E. Michigan Avenue, Hesperia.

Overview;

The Village of Hesperia Water Utility pumps a total of approximately 33 million gallons of water a year with a daily average of approximately 91,000 gallons per day.

Water Sources;

Our water source consists of three (3) wells. Two are located at 26 S. Division Street and both of these wells are ten (10) inches in diameter and are set at a depth of 135 feet. The third well is located at 374 S. Division Street and has a diameter of four (4) inches with a depth of 95 feet and 11 inches. At present time our water is not treated in any way.

Sources of drinking water (both tap 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, radio active material and can pick up substances resulting from the presence of animals or from human activity.

In 2014, the DEQ now known as EGLE, performed a source water assessment on our water supply. It was found that wells number 1 and 2 have a moderate susceptibility to contamination while number 3 has a moderately high susceptibility to contamination. For a copy of this report or more information, please contact the Village Clerk at 231-854-6205.

Contaminates 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 results from urban storm water 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 storm water run-off 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 station, urban run-off and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the results 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 amounts of certain contaminants in water provided by public water system. Food and Drug Administration regulation establishes limits for contaminants in bottled water which must provide the same protection for public health.

Health Effects for Lead and Copper

Lead: Infants and children who drink water-containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning disabilities. Adults who drink water over many years could develop kidney problems or high blood pressure.

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 Village of Hesperia 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 up 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 at <http://www.epa.gov/safewater/lead>.

Copper: Copper is an essential nutrient, but some people who drink water-containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water-containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

Lead: Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential source of lead in the household should be identified and removed or reduced.

In our continuing efforts to maintain a safe and dependable water supply it may be necessary to make improvements in your water system. The cost of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplant, 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 infections by cryptosporidium and other microbiological contaminants are from the Safe Drinking Water Hotline (800-426-4791)

In the following table you will find many 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) - laboratory analysis indicates that the contaminant 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.

Part 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.

Part per Trillion (ppt) or Nanograms per Liter - one part per trillion corresponds to one minute in 2,000,000 years or a single Penny in \$10,000,000,000.

Action Level (AL) - the concentration of a contaminant, which if exceeded, triggers treatment or other requirements, which a water system must follow.

Treatment Technique (TT) - A treatment technique is a required process intended to reduce the level of contaminant in drinking water.

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

N/A - Information is not available.

The Village of Hesperia is not required to test for all of the listed contaminants every year. These test results are the newest results available.

If you would like more information about these contaminants, feel free to contact us any time.

What does all this mean?

We have, through our monitoring and testing, found that some contaminants have been detected. The EPA has determined that your water is safe at these levels.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or manmade. These substances can be microbes, inorganic or organic chemicals and radioactive substances. All drinking water, including bottled water, may reasonably be expected to contain at least a small amount 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 (800-426-4791)

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, 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.

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

Regulated Contaminant	MCL, TT, or MRDL	MCLG or MRDLG	Level Detected	Range	Year Sampled	Violation Yes/No	Typical Source of Contaminant
Cyanide (ppm)	0.20	0.20	0.0051	ND – 0.0051	2021	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Nitrate (ppm)	10	10	1.4	ND – 1.4	2021	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Fluoride (ppm)	4	4	0.254	0.236 – 0.254	2020	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Sodium ¹ (ppm)	N/A	N/A	38.3	18.7 - 38.3	2020	No	Erosion of natural deposits

¹ Sodium is not a regulated contaminant.

² The chlorine “Level Detected” was calculated using a running annual average

Inorganic Contaminant Subject to ALs	AL	MCLG	90 th Percentile	Year Sampled	Number of Samples Above AL	Typical Source of Contaminant
Lead (ppb)	15	0	2	2020	0	Lead service lines, corrosion of household plumbing including fittings and fixtures; Erosion of natural deposits
Copper (ppm)	1.3	1.3	0.12	2020	0	Corrosion of household plumbing systems; Erosion of natural deposits

