Meeting the Challenge

We are once again proud to present our annual water quality report covering all testing performed between January 1 and December 31, 2018. Over the years we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Please share with us your thoughts or concerns about the information in this report, After all, well-informed customers are our best allies.

For more information about this report, or for any questions relating to your drinking water, please call (330) 426-4367 Ext. 11.

Where does my water come from?

The water supply for the Village of East Palestine comes from an alluvial sand and gravel aquifer flowing from the Northwest. There are three wells ranging from 50 to 75 feet in depth. These wells supplied 147.623 million gallons of water to the system in 2018. Treatment is achieved by the use of four pressure filters designed to remove Iron and Manganese from the raw water to meet E.P.A. standards. Chlorine gas is used for disinfection and Floride is added to promote strong teeth which is also regulated by E.P.A. standards.

Village of East Palestine
85 N. Market Street
East Palestine, OH 44413

Community Participation

You are invited to participate in our public forum and voice your concerns about your drinking water. The Village of East Palestine's City Council meets the 2nd and 4th Monday of each month beginning at 7 p.m. at The Village of East Palestine Municipal Building, 85 N. Market Street, East Palestine, OH.

You are also invited to contact John Jungwirth at (330) 426-4367 x11.

www.eastpalestine-oh.gov

Village of East Palestine

PWS ID# OH1500912

Annual Drinking Water Quality Report

2018

Substances That Could Be in Water

To ensure that tap water is safe to drink, U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration 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 these contaminants does not necessarily indicate that the water poses a health risk.

The sources of drinking water (both tap and bottled) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it can acquire naturally occurring minerals, in some cases, radioactive material; and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife.
- Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater 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 stormwater runoff, and residential uses.
- Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Tap vs. Bottled

Thanks in part to aggressive marketing, the bottled water industry has successfully convinced us all that water purchased in bottles is a healthier alternative to tap water. However, according to a four-year study conducted by the Natural Resources Defense Council, bottled water is not necessarily cleaner or safer than most tap water. In fact, about 25 percent of bottled water is actually just bottled tap water (40 percent according to government estimates).

The food and Drug Administration is responsible for regulating bottled water, but these rules allow for less rigorous testing and purity standards than those required by the U.S. EPA for community tap water. For instance, the high mineral content of some bottled waters makes them unsuitable for babies and young children. Further, the FDA completely exempts bottled water that's packaged and sold within the same state, which accounts for about 70 percent of all bottled water sold in the United States. People spend 10,000 times more per gallon for bottled water than they typically do for tap water. If you get your recommended eight glasses a day from bottled water, you could spend up to $1,400 annually. The same amount of tap water would cost about 49 cents. Even if you installed a filter device on your tap, your annual expenditure would be far less than what you'd pay for bottled water.

For a detailed discussion on the NRDC study results, check out their website at www.nrdc.org/water/drinking/bw/exesum.asp.

How Can I Get Involved?

The Village of East Palestine would like to encourage all residents to follow good environmental practices, by reading label information regarding the safe use of chemicals and other contaminants that have the potential to harm the environment and contaminate the water supplying the source water for the Village of East Palestine and the use of private wells.

Lead in Home Plumbing

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 East Palestine 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 at www.epa.gov/safewater/lead.

2018 Test Results

PWS ID#: OH1500912

The table below lists all the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of this report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old.

Disinfectants and Disinfection By-Products – Location 1

Contaminant (Units)	Collection Date	Level Detected	MCLG	MCL	Violation (Y/N)	Likely Source of Contamination
Haloacetic Acids (HAA5) (ppb)	7/7/18	6.0	NA	60	N	By-products of drinking water chlorination
Total Trihalomethanes (TTHM) (ppb)	7/7/18	2.0	NA	80	N	By-products of drinking water chlorination

Disinfectants and Disinfection By-Products – Location 2

Contaminant (Units)	Collection Date	Level Detected	MCLG	MCL	Violation (Y/N)	Likely Source of Contamination
Haloacetic Acids (HAA5) (ppb)	7/7/18	<6.0	NA	60	N	By-products of drinking water chlorination
Total Trihalomethanes (TTHM) (ppb)	7/7/18	20.0	NA	80	N	By-products of drinking water chlorination

Inorganic Contaminants

Contaminant (Units)	Collection Date	Level Detected	MCLG	MCL	Violation (Y/N)	Likely Source of Contamination
Barium (ppm)	2/13/17	0.08	2	2	N	Discharge of drilling wastes, metal refineries; erosion of natural deposits
Fluoride (ppm)	2/15/17	0.764	4	4.0	N	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories

Nitrate/Nitrite Contaminants

Contaminant (Units)	Collection Date	Level Detected	MCLG	MCL	Violation (Y/N)	Likely Source of Contamination
Nitrate (ppm)	1/11/18	0.213	10	10	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Lead and Copper

Contaminant (Units)	Collection Date	90th Percentile	# Of Samples over AL	MCLG	Action Level (AL)	Violation (Y/N)	Likely Source of Contamination
Copper (ppm)	2018	0.148	0	1.3	1.3	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead (ppb)	2018	ND	0	0	15	N	Corrosion of household plumbing systems; Erosion of natural deposits

Zero of the 20 samples were found to have levels in excess of Lead action level of 15 ppb. Zero of the 20 samples were found to levels in excess of the copper action level of 1.3 ppm.

Water Conservation

You can play a role in conserving water and saving yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

Source Water Information

A source water assessment was conducted in July of 2002 by the Ohio E.P.A. and is on file with the water department. A source water protection plan has been endorsed by the Ohio E.P.A.

The Ohio E.P.A. recently completed a study of Village of East Palestine's source of drinking water, to identify potential contaminant sources and provide guidance on protecting the drinking water source. According to this study, the aquifer (water-rich zone) that supplies water to the Village of East Palestine has a high susceptibility to contamination. This determination is based on the following:

- Lack of a protective layer of clay/shale/other overlying the aquifer;
- Shallow depth (less than 39 feet below ground surface) of the aquifer; and
- Presence of significant potential contaminant sources in the protection area.

This susceptibility means that under currently existing conditions, the likelihood of the aquifer becoming contaminated is relatively high. This likelihood can be minimized by implementing appropriate protective measures.

Do I Need to Take Special Precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) 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 (800) 426-4791 or http://water.epa.gov/drink/hotline.

Definitions

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

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety

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.

MRDL (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.

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 contaminants.

N/A: Not applicable

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

ppb (parts per billion): micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

ppm (parts per million): milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

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