

# EAST PALESTINE CONSUMER CONFIDENCE REPORT 2016

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## **Do I need to take special precautions?**

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

## **Where does my water come from?**

The water supply for the City 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 181.125 million gallons of water to the system in 2016. 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 Fluoride is added to promote strong teeth which is also regulated by E.P.A. standards.

## **Source water assessments and its availability**

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.

Ohio EPA recently completed a study of City 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 City 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.

## **License to Operate (LTO) Information:**

The Ohio EPA has issued a green LTO. This means the City has a current license to operate without any conditions.

## **Why are there contaminants in my drinking water?**

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) safe drinking water hotline (800-426-4791). 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 ground, it dissolves naturally occurring minerals and in some cases, radioactive materials, and can pick up substances resulting from the presence of animals or from human activity. Microbial contaminants, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agriculture 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 discharge, 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, 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 that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

## **Lead Educational Information:**

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 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 at 800-426-4791 or at <http://www.epa.gov/safewater/lead>.

## **How can I get involved?**

The City would like to encourage all residence 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 City and the use of private wells.

## **Public Participation Information:**

Information can be obtained for all chemical analysis done in 2016 at City Municipal Building located at 85 N. Market St. from 8 am and 4 pm. City Council meetings are the 2<sup>nd</sup> and 4<sup>th</sup> Monday of every month at 7:00 pm located at 85 N. Market St., East Palestine. The City website is [www.eastpalestine.oh.gov](http://www.eastpalestine.oh.gov). If any questions about the Consumer Confidence Report please contact John Jurjavic at 330-426-4367 X11.

## Detected Contaminants

The following contaminants were monitored for in your water. The results are listed below.

Contaminants	MCLG or MRDLG	MCL or MRDL	Level Found	Your Water	Sample Year	Violation	Typical Source
Nitrogen, Nitrate + Nitrite (as N) mg/l	10	10		ND	2011	No	Runoff from fertilizer use; leaching from septic tanks, sewage; Erosion of natural deposits
Nitrate	.05	.05		ND	2016	No	
Asbestos (mfl)	7			ND	2011	No	AC Transite Pipe
Synthetic Organic Chemicals	NA	NA	ND	ND	2014	No	Runoff of herbicides used on row crops
Radiological	NA	NA	ND	ND	2014	No	Gross alpha & radium 228 erosion of natural deposits
<b>Inorganic Contaminants</b>							
Barium (ppm)	2	2	0.071	0.071	2014	No	Discharge of drilling wastes; discharge from Metal Refineries; erosion of natural deposits
Fluoride, F, Dissolved (ppm)	4	4	0.49	0.49	2014	No	Erosion of natural deposit; Water additive which Promotes strong teeth; Discharge from the fertilizer and aluminum factories
Lead (ppb)	5	AL=15	ND	ND	2016	No	Corrosion of household plumbing systems
Zero of the 20 samples was found to have levels in excess of Lead action level of 15 ppb							
Copper (ppb)	10	AL=1300	0.214	0.214	2016	No	Corrosion of household plumbing systems

Zero of the 20 samples was found to have lead in excess of the cooper action level of 1.3 ppm

### Volatile Organic Contaminants

Bromodichloromethane (ppb)	NA	NA	1	1.0	2011	No	By product of drinking water chlorination
Chloroform(ppb)	NA	NA	.05	0.5	2011	No	By product of drinking water chlorination
Dibromochloromethane (ppb)	NA	NA	.07	0.7	2011	No	By product of drinking water chlorination

### Residual Disinfectants Location 1

TTHM's (ppb)	2.0	80	13.5	13.5	2016	No	By products of drinking water chlorination
Bromodichloromethane (ppb)	NA	NA	3.94	3.94	2016	No	By products of drinking water chlorination
Bromoform (ppb)	NA	NA	1.97	1.97	2016	No	BY products of drinking water chlorination
Chloroform (ppb)	NA	NA	2.69	2.69	2016	No	By products of drinking water chlorination
Dibromochloromethane (ppb)	NA	NA	4.86	4.86	2016	No	By products of drinking water chlorination
HAA5's (ppb)	6	6	ND	ND	2016	No	By product of drinking water chlorination
Trichloroacetic Acid (ppb)	1	NA	ND	ND	2016	No	By product of drinking water chlorination
Dibromacetic Acid (ppb)	1	NA	ND	ND	2016	No	By product of drinking water chlorination
Dichloroacetic Acid (ppb)	1	NA	ND	ND	2016	No	By product of drinking water chlorination

### Location 2

TTHM's (ppb)	2.0	80	18.4	18.4	2016	No	By Product of drinking water chlorination
Bromodichloromethane (ppb)	NA	NA	5.95	5.95	2016	No	By product of drinking water chlorination
Bromoform (ppb)	NA	NA	1.65	1.65	2016	No	By product of drinking water chlorination
Chloroform (ppb)	NA	NA	4.14	4.14	2016	No	By Product of drinking water chlorination
Dibromochloromethane (ppb)	NA	NA	6.68	6.68	2016	No	By product of drinking water chlorination
HAA5's (ppb)	6	6	ND	ND	2016	No	By product of drinking water chlorination
Trichloroacetic Acid(ppb)	1	NA	ND	ND	2016	No	By product of drinking water chlorination
Dibromacetic Acid(ppb)	1	NA	ND	ND	2016	No	By product of drinking water chlorination
Dichloroacetic Acid(ppb)	1	NA	ND	ND	2016	No	By product of drinking water chlorination

### Unit Terms

#### Terms Definition

ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (ug/L)
NA	NA: not applicable
ND	ND: not detected
NR	NR: monitoring not required, but recommended

### Important Drinking Water Definitions

#### Term Definition

MCLG	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 margin of safety
MCL	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.
TT	TT: Treatment technique: A required process intended to reduce the level of a contaminant in drinking water
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variance and Exemptions	Variance and Exemptions: State or EPA permission not to meet and MCL or a treatment technique certain conditions
MRDLG	MRDLG: Maximum residual disinfection 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
MRDL	MRDL: Maximum residual disinfectant level: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of disinfectant is necessary for control of microbial contaminants
MNR	MNR: Monitored not regulated
MPL	MPL: State assigned Maximum permissible level
MFL	MFL: Millions of fibers per liter