



CITY OF  
**PICKERINGTON**

## **Drinking Water Consumer Confidence Report for 2015**

The City of Pickerington has prepared the following report to provide drinking water information. Included within this report is general health information, water quality test results, how to participate in decisions concerning your drinking water, and water system contacts.

The City of Pickerington has a current unconditioned license to operate our water system.

### **SOURCE WATER INFORMATION.**

The City of Pickerington receives its drinking water from five wells located at the water plant site west of Diley Road, which are in the Newark River aquifer. A new production well was drilled in late 2014 and put into service September 2015. The City of Pickerington also has an emergency interconnect with Fairfield County Utilities at three locations, these connections were not used in 2015. This report does not contain information on the water quality received from Fairfield County but a copy of their consumer confidence report can be obtained by contacting Fairfield County Utilities at 614-322-5200.

A Wellhead Protection Plan has been developed by the City and approved by the Ohio EPA. The plan identifies an area of land above the aquifer where land uses could affect the water supply within a 5 year period. The identification of any existing potential pollution to the aquifer in these areas has been completed and a plan is being implemented by the City to reduce the risk of future impacts and /or contamination to the City's water supply.

The aquifer that supplies drinking water to the City of Pickerington has a moderate susceptibility to contamination due to the sensitivity of the aquifer in which the drinking water well is located and the existence of several potential contaminant sources within the protection zone. This does not mean that the City's well field will become contaminated; only that conditions are such that the ground water could be impacted by potential contaminant sources. Future contamination may be avoided through protective measures which the City is currently implementing per its wellhead protection plan. More information or a copy of the wellhead protection plan is available by calling Ed Drobina, Service Director at 614-833-2292.

### **WHAT ARE SOURCES OF CONTAMINATION TO DRINKING WATER?**

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: (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife; (B) 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; (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses; (D) Organic chemical contaminants, including synthetic and volatile organic chemicals,

which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems; (E) 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, the USEPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. FDA 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 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 Safe Drinking Water Hotline (1-800-426-4791).

### **WHO NEEDS TO TAKE SPECIAL PRECAUTIONS?**

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 transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infection. These people should seek advice about drinking water from their health care providers. The EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

### **ABOUT YOUR DRINKING WATER**

The Ohio EPA requires regular sampling to ensure drinking water safety. The City of Pickerington conducted sampling for *bacteria; inorganics; nitrate; nitrite; radiological; volatile organic chemicals; synthetic organic chemicals; lead and copper; haloacetic acids and total trihalomethanes*. 240 samples were collected for total coliform bacteria during 2015. The Ohio EPA requires the City of Pickerington to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, is more than one year old.

### **MONITORING AND REPORTING VIOLATIONS**

During the months of August and September 2015, the City of Pickerington exceeded the secondary contaminant level of manganese. These contaminants are not health threatening at the SMCL (secondary maximum contaminant level).

Why is it necessary to set secondary standards?

EPA believes that if these contaminants are present in your water at levels above these standards, the contaminants may cause the water to appear cloudy or colored, or to taste or smell bad. Noticeable effects of manganese above the Secondary MCL could be black to brown color; black staining; bitter metallic taste. The City of Pickerington has taken one of the four treatment filters offline for repair to ensure manganese removal.

## WATER QUALITY MONITORING INFORMATION

Following is information on those contaminants that were found in the City of Pickerington drinking water.

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detection	Violation	Sample Year	Typical Source of Contaminants
<b>LEAD AND COPPER</b>							
LEAD (PPB)	0	15.0 AL	<5.0	NA	NO	2015	Corrosion of household plumbing systems; erosion of natural deposits
	Out of 30 samples none were found to have lead levels in excess of the Action Level of 15 ppb						
COPPER (PPM)	1.3	1.3 AL	0.300	NA	NO	2015	Corrosion of household plumbing systems; erosion of natural deposits; leaching of wood preservatives
	Out of the 30 samples none were found to have copper above the Action Level of 1300 ppb.						

<b>RADIOLOGICAL CONTAMINANTS</b>							
GROSS ALPHA PCI/L	0	15	<3 PCI/L	NA	NO	2014	Erosion of natural deposits
COMBINED RADIUM	0	5	<1 PCI/L	NA	NO	2014	Erosion of natural deposits

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detection	Violation	Sample Year	Typical Source of Contaminants
<b>INORGANIC CONTAMINANTS</b>							
FLUORIDE (PPM)	4	4	1.03	.72 to 1.08	NO	2015	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
BARIUM (PPM)	2	2	<.025	NA	NO	2014	Discharge of drilling wastes, erosion of natural deposits
NITRATE(PPM)	10	10	<0.10	NA	NO	2015	Runoff from fertilizer use; Erosion of natural deposits
ARSENIC( PPB)	0	10	<3.0	NA	NO	2014	Erosion of natural deposits; runoff from orchards and glass production
<b>RESIDUAL DISINFECTANTS</b>							
TOTAL CHLORINE (PPM)	MRDLG=4	MRDL=4	.81	.85-1.17	NO	2015	Water additive used to control microbes

DISINFECTION BYPRODUCTS							
TOTAL TRIHALOMETHANE (TTHM) (PPB)	NA	80	12.4	11.6-12.4	NO	2015	By-product of drinking water chlorination
HALOACETIC ACIDS (HAA5) (PPB)	NA	60	<6.0	<6.0	NO	2015	By-product of drinking water chlorination

UNREGULATED CONTAMINANTS							
NAME	AVERAGE			RANGE			
CHLORATE PPB			116.97			NA	
MOLYBDENUM PPB			2.951			NA	
STRONTIUM PPB			156.51			NA	

UNREGULATED CONTAMINANTS ARE THOSE FOR WHICH THE EPA HAS NOT ESTABLISHED DRINKING WATER STANDARDS. THE PURPOSE OF UNREGULATED CONTAMINANT MONITORING IS TO ASSIST THE EPA IN DETERMINING THE OCCURRENCE OF UNREGULATED CONTAMINANTS IN DRINKING WATER AND WHETHER FUTURE REGULATION IS WARRANTED.

## LEAD

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 Pickerington 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 <http://www.epa.gov/safewater/lead>.

Nitrate in drinking water at levels above 10 ppm is a health risk for infants less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

Public participation and comments about our drinking water are encouraged at regular meetings of City Council and Service Committee which meet the first and third Tuesdays and third Wednesday of each month.

**For more information** on your drinking water contact Ed Drobina, Service Director, at (614-833-2292) or Glen Hacker, Utilities Plant Superintendent at (614-833-2290).

## **INITIAL DISTRIBUTION SYSTEM EVALUATION**

Under the stage 2 disinfectants/distribution byproducts rule, our public water system was required by USEPA to conduct an evaluation of our distribution system. This is known as an initial distribution system evaluation (IDSE) and is intended to identify locations in our distribution system with elevated disinfection byproduct concentrations. The locations selected for the IDSE may be used for compliance monitoring under stage 2 DBP beginning in 2012. Disinfection byproducts are the result of providing continuous disinfection of your drinking water and form when disinfectants combine with organic matter naturally occurring in the source water. Disinfection byproducts are grouped into two categories, total trihalomethanes (tthm) and haloacetic acids (haa5). USEPA sets standards for controlling the levels of disinfectants and disinfectant byproducts in drinking water.

### **DEFINITIONS OF SOME TERMS CONTAINED WITHIN THIS REPORT.**

Maximum Contaminant Level Goal (MCLG) - 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 Contaminant Level (MCL) - The highest level of 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 Residual Disinfectant Level Goal (MRDLG) - The level of residual disinfectant below which there is no known or expected risk to health.

Maximum Residual Disinfectant Level - The highest residual disinfectant level allowed.

Parts per Million (ppm) or Milligrams per Liter (mg/L) - Units of measure for concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 days.

Parts per Billion (ppb) or Micrograms per Liter (µg/L) - Units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.

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

The "<" symbol - A symbol that means "less than". A result of <5 means that the lowest level that could be detected was 5 and the contaminant in that sample was not detected.

Free available chlorine - The residual formed once all the chlorine demand has been satisfied. This chlorine residual is not combined with other constituents in the water and is (free to kill microorganisms).

Combined chlorine - The chlorine residual produced by the reaction of chlorine with substances in the water.

Total coliform - Indicator of possible contamination.

Total chlorine - The sum of combined chlorine residual and the free chlorine residual.

pci/l - Total picocuries per liter