

# **Village of Pemberville**

## **2007**

### **DRINKING WATER**

### **CONSUMER CONFIDENCE REPORT**



To comply with the Safe Drinking Water Act Amendments, the Village of Pemberville Water Department has prepared the following report to provide information to you, the consumer, on the quality of our drinking water, which has been designated as a ground water source by the Division of Drinking and Ground Water. A table is included later in the report listing detected contaminants within the last five years. Also included in the report is general information, water quality test results, how to participate in decisions concerning your drinking water and water system contacts.

In 2007, the Village Water Department continued to make improvements and upgrades to the water treatment and distribution system. Engineering has progressed and construction started for the replacement of the North Water Plant. This state of the art facility should be in service by the end of 2008.

Both water plants are operated and maintained by one employee with an Ohio EPA Class I Water Operator License. To ensure the quality and consistency of the water, the water plants are checked 365 days a year. In 2007, 49,619,000 gallons of water were produced for our customers, a daily average of 136,000 gallons.

\*Under the Stage 2 disinfectants / Disinfection Byproducts Rule (D/DBPR), 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 DBPR, beginning in 2012. Disinfection byproducts are the result of 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 Acid (HAA5). USEPA set standards for controlling the levels of disinfectants and disinfectant byproducts in drinking water, including both THMs and HAAs.

#### **What are sources of contamination to drinking water?**

The 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, radioactive material, 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, EPA 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 Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791)

The Ohio EPA has completed a drinking water source assessment report for the Village of Pemberville. This report includes an evaluation of how susceptible our drinking water is to contamination. It has been determined the aquifer that supplies drinking water to the Village of Pemberville has a high susceptibility to contamination, due to the nature of the aquifer in which the drinking water wells are located and the existing potential contaminate sources identified. This does not mean that these well fields will become contaminated; only that conditions are such that the ground water could be impacted by potential contaminated sources. Future contamination may be avoided by implementing protective measures. A copy of the drinking water source assessment report and /or more information is available by calling 419-287-3832.

#### **Who needs 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 infection. These people should seek 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 microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

The EPA requires regular sampling to ensure drinking water safety. The Village of Pemberville conducted sampling for a variety of potential contaminants during 2007. The Ohio EPA requires us to monitor for some contaminants less than once per year because the concentrations of the contaminants do not frequently change. Some of our data, though accurate, is more than one year old.

REPORTABLE TEST RESULTS FOR VILLAGE OF PEMBERVILLE							
CONTAMINANT (UNITS)	MCLG	MCL	LEVEL FOUND	RANGE OF DETECTIONS	VIOLATION	SAMPLE YEAR	TYPICAL SOURCE OF CONTAMINANTS
<b><u>Inorganic Contaminants</u></b>							
Barium (ppm)	2	2	0.032	<0.025 - 0.032	NO	2007	Erosion of natural deposits
Fluoride, Total(ppm)	4	4	1.18	0.61 - 1.18	NO	2007	Erosion of natural deposits; Discharge from fertilizer.
Copper (ppm)	1.3	AL=1.3	0.486	0.050 - 0.710	NO	2007	Corrosion of household plumbing systems
Nitrate (ppm)	10	10	0.16	0.13 - 0.18	NO	2007	Leaching from septic tanks, sewage, erosion of natural deposits
Nitrate - Nitrite (ppm)	10	10	0.16	0.13 - 0.18	NO	2007	Leaching from septic tanks, sewage, erosion of natural deposits
Nitrite(ppm)	1	1	0.10	.010-0.10	NO	2007	Leaching from septic tanks, sewage, erosion of natural deposits
<b><u>Volatile Organic Contaminants</u></b>							
Total Trihalomethane (TTHM) (ppb)	NA	80	45.0	28.9 - 56.6	NO	2007	By product of drinking water chlorination
Haloacetic Acids (HAA5) (ppb)	NA	60	9.9	9.8 - 9.9	NO	2007	By product of drinking water chlorination
<b><u>Residual Disinfectants</u></b>							
Total Chlorine (ppm)	4.0	4.0	1.2	.8 - 1.7	NO	2007	Water additive used to control microbes
<b><u>General Analysis</u></b>							
Sodium (ppm)	None	NR	137.6	70.9 - 167.0	NO	2007	By product of the treatment process

**Definitions of some terms contained within this report.**

**Maximum Contaminate 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. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of drinking water disinfectant below which there is no known or expected risk to health.

**Maximum Residual Disinfectant Level (MRDL):** The highest level of disinfectant allowed in drinking water.

**Secondary Maximum Contaminant Level (SMCL):** The advisable maximum level of a contaminant in drinking water. These contaminants are those that are typical to drinking water and are not enforced by the US EPA.

**Parts Per Million (ppm) or Milligrams Per Liter (mg/L)** are units of measure for concentration of a contaminant. A part per million corresponds to one second in little over 11 ½ days.

**Parts Per Billion (ppb) or Micrograms Per Liter (ug/L)** are 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, which, if exceeded, triggers treatment, or other requirements, which a water system must follow.

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

**Health Effect of 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 abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

**Additional Lead Education Information**

Infants and young children are typically more vulnerable to lead drinking water than the general population. It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for thirty seconds to two minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

Public participation and comments are encouraged at the regular meetings of the Board of Public Affairs, which meets the Monday prior to the first and third Tuesdays of each month. The meetings are held at 7:00p.m. in the council chambers.

**For more information on your drinking water, contact Gale Loeblich, Water Department Superintendent at (419)287-3832.**