# Village of Pemberville 2009 DRINKING WATER CONSUMER CONFIDENCE REPORT



We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2009.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.

## DRINKING WATER CONSUMER CONFIDENCE REPORT FOR 2009 FOR THE VILLAGE OF PEMBERVILLE

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 2009, the Village Water Department continued to make improvements and upgrades to the water treatment and distribution system. Construction was completed for the replacement of the North Water Plant. This state of the art facility was in service by the end of 2009. Work was also completed on the new Telemetry for both the North Water Plant and the South Water Plant and also the Elevated Water Tower. Both Safety and Sanitation upgrades were also made to the Elevated Water Tower.

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 2009, 57,234,800 gallons of water were produced for our customers, for a daily average of 156,380 gallons.

We have a current, unconditioned license to operate our water system.

How do I participate in decisions concerning my drinking water?

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.

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. USEPA/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 Drinking Water Hotline (1-800-426-4791)

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

## **Additional General Information on 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.

**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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

#### Contaminants that may be present in source water include:

- *Microbial contaminants*, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Inorganic contaminants*, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, that 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, that are by-products of industrial processes and petroleum production, and can also, come from gas stations, urban storm water runoff, agricultural application, and septic systems.
- Radioactive contaminants that can be naturally-occurring or be the result of oil and gas production and mining activities.

### • Typical Health Effects

Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.

Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of children's teeth, usually in children less than nine years old. Mottling also known as dental fluorosis may include brown staining and/or pitting of the teeth. and occurs only in developing teeth before they erupt from the gums

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.

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.

Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.

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Some people who drink water containing alachlor in excess of the MCL over many years could have problems with their eyes, liver, kidneys, or spleen, or experience anemia, and may have an increased risk of getting cancer.

Some people who drink water containing atrazine well in excess of the MCL over many years could experience problems with their cardiovascular system or reproductive difficulties.

Some people who drink water containing simazine in excess of the MCL over many years could experience problems with their blood.

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

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 Pemberville 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.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at 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 you home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791).

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

#### TERMS USED IN THIS REPORT

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

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 are set by the U.S. Environmental Protection Agency (USEPA).

**Public Health Goal (PHG)**: The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Maximum Residual Disinfectant Level (MRDL): 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.

Maximum Residual Disinfectant Level Goal (MRDLG): 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.

**Primary Drinking Water Standards (PDWS)**: MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

**Secondary Drinking Water Standards (SDWS):** MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

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

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

**Variances and Exemptions**: Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

**ND**: not detectable at testing limit

**ppm**: parts per million or milligrams per liter (mg/L)

**ppb**: parts per billion or micrograms per liter (ug/L)

**ppt**: parts per trillion or nanograms per liter (ng/L)

ppq: parts per quadrillion or picogram per liter (pg/L)

pCi/L: picocuries per liter (a measure of radiation)

In order to ensure that tap water is safe to drink, the USEPA and the state Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

The tables list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The Department allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

Listed below is the information on those contaminants that were found in Village of Pemberville's drinking water.							
Contaminants (Units)	MCI G	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
Inorganic Contaminants							
Barium (ppm)	2	2	0.032	<0.025 - 0.032	NO	2007	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride, Total(ppm)	4	4	1.2	0.61 - 1.18	NO	2007	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Copper (ppm)	1.3	AL= 1.3	0.4398	0.050 - 1.100	NO	2009	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppm)	0.015	AL = 0.015	<.005	<.005-<.005	NO	2009	Corrosion of household plumbing systems; Erosion of natural deposits
Nitrate (ppm)	10	10	< 0.1	< 0.10 -< 0.10	NO	2009	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrate - Nitrite (ppm)	10	10	< 0.1	< 0.10- < 0.10	NO	2009	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite(ppm)	1	1	< 0.1	< 0.10 -< 0.10	NO	2009	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Synthetic Organic Contaminants including Pesticides and Herbicides							
Alachlor (ppb	) 2	2	< 0.20	< 0.20 - < 0.20	NO	2009	Runoff from herbicide used on row crops
Atrazine (ppb)	) 3	3	< 0.30	< 0.30 - < 0.30	NO	2009	Runoff from herbicide used on row crops
Simazine (ppb	) 4	4	< 0.40	< 0.40 - < 0.40	NO	2009	Runoff from herbicide used on row crops
<u>Volatile Organic Contaminants</u>							
Total Trihalomethan (TTHM) (ppb		80	66.9	50.5 – 66.9	NO	2009	By-product of drinking water chlorination
Haloacetic Acids (HAA5 (ppb)	) NA	60	14.6	14.0 – 14.6	NO	2009	By-product of drinking water disinfection
Residual Disinfectants							
Total Chlorine (ppm)	4	4	1.21	.4 - 2.1	NO	2009	Water additive used to control microbes
General Analysis							
Sodium (ppm)	None	NR	153	153	NO	2009	By product of the treatment process

<sup>\*</sup>Any violation of an MC or AL is asterisked. Additional information regarding the violation is provided later in this report.

<sup>\*</sup>Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

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