

## THE VILLAGE OF MINGO JUNCTION DRINKING WATER REPORT FOR 2008

**The Mingo Junction Water Works** has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included within this report is general health information, water quality test results, how to participate in decisions concerning your drinking water and system contact people.

**The village receives its drinking water** from wells which are drilled to a depth of approximately seventy feet. The North Well is located adjacent to the old water works plant inside the steel mill complex and the South Well is located just outside the left-field fence at Porter Field. The EPA had classified us a surface water plant because of our close proximity to the Ohio River, but in 2004, we were re-classified as a groundwater facility. We also have an emergency connection to the Jefferson County system which is located on Wilson Avenue near the village corporation limits. This source was not used in 2008.

**High Susceptibility PWS Based on High Sensitivity: Ohio EPA had previously completed a study of** Mingo Junction'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 Mingo Junction 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, 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. In order to prevent contamination the Village of Mingo junction has joined the Southern Jefferson County Source water protection team in a joint effort with the surrounding communities to protect water supplies and be able to react to any contamination. More information about the source water assessment or what consumers can do to help protect the aquifer is available by calling the water plant at 740-535-9162.

**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, and can also pick up substances resulting from the presence of animals or from human activity.

### **Contaminants 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 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 discharges, 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 production 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**, the 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 1-hotline (1-800-426-4791).

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. 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 Mingo junction water works conducted sampling for *bacteria; inorganic; radiological; synthetic organic; volatile organic* contaminant sampling during 2008. Samples were collected for a total of approximately one hundred different contaminants, most of which were not detected in the Mingo Junction water supply. The Ohio EPA requires us 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, are more than one year old.

Listed below is information on those contaminants that were found in the Village of Mingo Junction's drinking water.

### 2008 Table of Detected Contaminants

MCLG	MCL	LEVEL	RANGE OF	VIOLATION	YEAR	TYPICAL SOURCE OF FOUND
DETECTION	SAMPLED		CONTAMINATION			
Residual Disinfectants						
Chlorine (ppm)	MRDL <= 4.0	MRDL<= 4.0	0.70	0.42-1.05	NO / 2008	Water additive used to control microbes
Radiological Contaminants						
Beta (pCi/L) EPA considers 50 pCi/L to be the level of concern for beta particles	0	50.0	4.39	NA	NO / 2003	Decay of natural and man-made Deposits.
Inorganic Contaminants						
Copper (ppb)	1,300	Action	<50	<50-129 ug/l	NO 2008	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride (ppm)	4.00	4.00	0.97	0.81-1.21	NO 2008	Erosion of natural deposits, water additive which promotes strong teeth.
Barium (ppb)	2000	2000	14.00	NA	NO 2006	Discharge of drilling wastes; Discharge from metal refineries, Erosion of natural deposits.
Nitrate (ppm)	10.00	10.00	0.35	NA	NO 2008	Runoff from fertilizer use; erosion of natural deposits.
Lead (ppb)	0	Action limit 15	<5.0	NA	NO 2008	Corrosion of household plumbing systems; erosion of natural deposits.
Volatile Organic Contaminants						
Total Trihalomethanes (ppb)	80	80	56.2 ug/l	NA	NO / 2008	By-products of drinking water chlorination
Five Halo acetic Acids(ppb)	60	60	10.4 ug/l	NA	NO / 2008	By-product of drinking water chlorination
Bromo-dichloro methane (ppb)	NA	NA	8.1 ug/l	NA	NO / 2008	By-product of drinking water chlorination

## Following is a list of definitions for some terms contained in this report:

– **Maximum Contaminant Level Goal (MCLG):** the level of a contaminant in drinking water below which there is no known or expected health risk; MCLGs allow for a margin of safety. \_

**Maximum Contaminant Level (MCL):** 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.

**Parts per million (ppm) or milligrams per liter (mg/l)** are units of measure for concentration of a contaminant. A ppm corresponds to one second in a little over eleven-and-one-half days.

**Parts per billion (ppb) or micrograms per liter (ug/l)** are units of measure for concentration of a contaminant. A ppb corresponds to one second in over thirty-one years.

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

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

< = less than

NA: acronym for not applicable

**Public participation and comments are encouraged at regular meetings of village council,** which meets every second and fourth Tuesday of each month at 7:00 pm at the municipal building located at 501 Commercial Street in downtown Mingo Junction. If meeting times are changed for any reason, notification of such will be published in our local newspaper. For more information, contact Barry Edwards at the water plant during business hours @ 740-535-9162 or 740-535-1072.