

2003 ANNUAL DRINKING WATER QUALITY REPORT VILLAGE OF MILFORD

JUNE 5, 2004

We're pleased to present to you this year's Annual Quality Water Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water source is from two 12-inch diameter water wells, 114 feet deep owned by the Village of Milford. Our wells draw water from an underground aquifer located in Central Park that extends north towards Moore Lake in Milford Township. Once the water is pumped from the aquifer, the water is pumped to the Iron Removal Plant and filtered to remove the iron. Chlorine is added as a disinfectant to protect the water after it leaves the plant. Fluoride is added to the water as it leaves the plant to prevent tooth decay. With improvements during the past several years, the system water storage capacity in the two water towers is now 1,145,000 gallons.

The Village of Milford has developed a Well Head Protection Plan (WHPP) that has been approved by the Michigan Department of Environmental Quality. This is an important tool for the protection of our community's drinking water source. Educating the public and our water customers on the proper disposal of chemicals, water conservation, and being informed of the source of our drinking water are important educational tools of a WHPP. Information on the WHPP is available at the Village Offices or Department of Public Services.

I'm pleased to report that our drinking water is safe and meets or exceeds federal and state requirements.

If you have any questions about this report or concerning your water utility, please contact us. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on **the first and third Mondays of each month at 7:30 PM at the Village Offices.**

The Village of Milford routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st to December 31st, 2003. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Not-Detected (ND) - laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

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

Maximum Contaminant Level - The “Maximum Allowed” (MCL) is 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.

Maximum Contaminant Level Goal - The “Goal”(MCLG) is 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.

The State allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. The table below represents the most current testing information available.

Compounds reported as TRACE were detected at levels above the detection limits, but at levels too low to quantitate.

| Inorganic Contaminants | | | | | | |
|-------------------------------|----------------------|-----------------------|------------------------|-------------|------------|---|
| Contaminant | Violation Y/N | Level Detected | Unit of Measure | MCLG | MCL | Major Sources in Drinking Water |
| Arsenic | N | 0.002 | ppm | 0 | *0.10 | Naturally present in groundwater. |
| Fluoride | N | 0.2 | ppm | 4 | 4 | Erosion of natural deposits; water additive, which promotes strong teeth; discharge from fertilizer and aluminum factories. |

*These arsenic values are effective January 23, 2006. Until then, the MCL is 0.05mg/l and there is no MCLG.

| Volatile Organic Contaminants | | | | | | |
|--------------------------------------|----------------------|-----------------------------|------------------------|-------------|------------|---|
| Contaminant | Violation Y/N | Range Lowest-Highest | Unit of Measure | MCLG | MCL | Major Sources in Drinking Water |
| CIS, 1,2-Dichloroethylene | N | 0.0009 - 0.0010 | ppb | 0.07 | 0.07 | Discharge from industrial chemical factories. |
| Chloroform | N | 0.0 - 0007 | ppb | N/A | 0.80 | Discharge from industrial chemical factories. |
| Methyl Tert-butyl Ether | N | 0.002 - 0.003 | ppb | N/A | N/A | Discharge from industrial chemical factories. |
| TTHM (Total Trihalomethanes) | N | 0.004 – 0.0010 | ppb | 80ppb | 10ppb | By-product of drinking water chlorination. |

While you drinking water meet’s EPA’S standard for arsenic, it does contain low levels of arsenic. EPA’S standard balances the current understanding of arsenic’s possible health effects against the costs of removing levels of arsenic, from drinking water. EPA continues to research

the health effects of low levels of arsenic, which is a mineral known to cause in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Some people who drink water-containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

SPECIAL MONITORING

The following list contains VOC's (Volatile Organic Compounds)* that we test every three months for that are not found in our water.

| | |
|----------------------------|----------------------------|
| BENZENE | DICHLOROPROPENE,1,3-CIS |
| BROMOBENZENE | DICHLOROPROPENE,1,3-TRANS |
| BROMOCHLOROMETHANE | ETHYBENZENE |
| BROMOFORM | FLUOROTRICHLOROMETHANE |
| BROMOMETHANE | HEXACHLOROBUTADIENE |
| BUTYLBENZENE, NORMAL- | HEXACHLOROETHANE |
| BUTYLBENZENE, SEC- | ISOPROPYL BENZENE |
| BUTYLBENZENE, TERT- | ISOPROPYL TOULENE,PARA- |
| CARBON TETRACHLORIDE | METHYL ETHYL KETONE |
| CHLOROBENZENE | METHYL ISOBUTYL KETONE |
| CHLORODIBROMOMETHANE | METHYLENE CHLORIDE |
| CHLOROETHANE | NAPHTALENE |
| CHLOROMETHANE | PROPYLBENZENE, NORMAL- |
| CHLOROTOULENE (COMBINED) | STYRENE |
| DIBROM-3-CHLOROPROPANE,1,2 | TETRACHLOROETHANE,1,1,1,2- |
| DIBROMOETHANE 1,2-(EDB) | TETRACHLOROETHANE,1,1,2,2- |
| DIBROMOMETHANE | TETRACHLOROETHYLENE |
| DICHLOROBENZENE,1,2- | TETRAHYDROFURAN |
| DICHLOROBENZENE,1,3- | TOLUENE |
| DICHLOROBENZENE,1,4- | TRICHLOROBENZENE,1,2,3- |
| DICHLOROBUTANE,1,4- | TRICHLOROBENZENE,1,2,4- |
| DICHLORODIFLUOROMETHANE | TRICHLOROETHANE,1,1,1- |
| DICHOLORETHANE,1,1- | TRICHLOROETHANE,1,1,2- |
| DICHLOROETHANE,1,2- | TRICHLOROETHYLENE |
| DICHLOROETHYLENE,1,1- | TRICHLOROPROPANE,1,2,3- |
| DICHLOROETHYLENE,1,2-TRANS | TRIMETHYLBENZENE,1,2,4- |
| DICHLOROPROPANE,1,2- | TRIMETHYLBENZENE,1,3,5- |
| DICHLOROPROPANE,1,3- | VINYL CHLORIDE |
| DICHLOROPROPANE,2,2- | XYLENE, ORTHO- |
| DICHLOROPROPENE,1,1- | XYLENE,META-&PARA- |
| | XYLENES (TOTAL) |

*VOC's are man-made chemicals such as paint thinner, dry cleaning fluid, solvents, and components of gasoline, other petroleum products and plastics.

Unregulated contaminants are those for which EPA has not established drinking water standards. Monitoring helps EPA to determine where these contaminants occur and whether it needs to regulate those contaminants.

| Special Monitoring | | | | |
|---------------------------|------|------------------------|--------------------------|----------------------------------|
| Substance | Unit | Highest detected level | Minimum Reportable Limit | Major Sources in Drinking Water |
| Sodium | ppm | 60 ppm | 5 ppm | Naturally present in groundwater |

Lead and Copper Monitoring

The Village of Milford Water Department staff has drawn samples from 20 homes throughout the water system, based on EPA requirements to test for the presence of lead and copper in the drinking water. The test results below show the samples taken are well below the action level of 15 ppb for lead and 1300 ppb for copper. The next round of testing will be conducted during June 1, 2005 to September 30, 2005.

| Lead & Copper Distribution System Monitoring Results | | | | | | |
|---|-------------------|------------------------|-----------------------------|------------------------------|--------------|---|
| Contaminant | Date Tested | Number of Sites Tested | 90 th Percentile | # of Sites over Action Level | Action Level | Major Sources in Drinking Water |
| Lead | 6-1-02 9-30-02 | 20 | 4 | 0 | 15 ppb | Corrosion of household plumbing systems; erosion of natural deposits. |
| Copper | 6-1-02 9-30-02 | 20 | 130 | 0 | 1300 ppb | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives. |

As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be:

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 stormwater 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 and residential uses.

Radioactive contaminants, which are naturally occurring or be the result of oil and gas production and mining activities.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, can also come from gas stations, urban stormwater runoff, and septic systems. All 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 Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791. MCL's are set at very stringent levels.

To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Water System Capital Improvements

In our continuing efforts to maintain a safe and dependable water supply it is necessary to make improvements in your water system. The cost of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. The Village of Milford has used funds from a 2-1/2 % interest loan through the Michigan Department of Environmental Quality (MDEQ) called the Drinking Water Revolving Funds to make improvements to the water system.

During the past 6 years, the water mains, fire hydrants, and valves on Huron-GM Roads and West Commerce were replaced with 12-inch pipe. East Liberty, First, Atlantic, West Lafayette, and Bellevue Street water mains have all been replaced with new 8-inch pipe. A new 12-inch pipe from the Well House in Central Park to Byron Street was installed that increases the volume of water in the system to the south/southwest sections of the system. We have recently replaced the North Water Tower and booster pump station increasing its capacity to 650,000 gallons. The replacement of the South Water Tower was completed in July 2002. The new capacity of the South Water Tower is 495,000 gallons.

The total system storage capacity is now 1,145,000 gallons compared to the old capacity of 500,000 gallons.

These low interest loan funds also made it possible to recondition the Water Treatment Plant Iron Removal Filters and install a new Water Booster Pump Station on Winding Way that has increased water pressures in the southern pressure zone. These and other improvements are recommendations from the Village of Milford; Water Distribution System Master Plan established in 1990 and updated in the spring of 2000.

The reconditioning of both water wells this past year, a preventive maintenance activity has returned the pumping capacity of the wells back to near the designed capacity when installed.

In planning for the future, funds have been allocated to install a new production water well on the west side of the community that will be used as a backup well. An 50% matching funds MDEQ Grant will be used for the delineation of the new wellfield.

Since the events of September 11, 2001, the Village of Milford has reviewed the security of the Village Water System and facilities. New equipment has been installed that will notify us of unauthorized entry. Security of the system will be regularly reviewed to insure the safety of the drinking water.

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.

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/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Please call Department of Public Service office at 248-685-3055 if you have questions.

We at the Village of Milford work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

Copies of this report are available at the Village Offices, Milford Library or the Department of Public Service Offices. You may also view the report on the Internet at **milford.lib.mi.us**.

Respectfully,

Frederick J. Morin
Director of Public Service