# Town of Collierville Water Quality Report – 2006

## IS MY DRINKING WATER SAFE?

The Town's water meets all of EPA's health standards. On a daily basis our water is tested for chlorine, fluoride, pH, carbon dioxide, and alkalinity. We also test for over 80 possible contaminants at intervals prescribed by the EPA.

## WHAT IS THE SOURCE OF MY WATER?

Your water comes from deep, underground aquifers, which is pumped directly to the one of five water treatment plants by twelve wells for processing. All of the wells come from the Memphis Sands, about 350 feet deep. Our goal is to protect our water from contaminants and we are working with the State to determine the vulnerability of our water source to **potential** contamination. The Tennessee Department of Environment and Conservation (TDEC) has prepared a Source Water Assessment Program (SWAP) Report for the untreated water sources serving water this system. The SWAP Report assesses the susceptibility of untreated water sources to **potential** contamination. To ensure safe drinking water, all public water systems treat and routinely test their water. Water sources have been rated as reasonably susceptible, moderately susceptible or slightly susceptible based on geologic factors and human activities in the vicinity of the water source. The Town of Collierville Water System sources rated as moderately susceptible to potential contamination.

An explanation of Tennessee's Source Water Assessment Program, the Source Water Assessment summaries, susceptibility scorings and the overall TDEC report to EPA can be viewed online at www.state.tn.us/environment/dws/dwassess.php or you may contact the Water System to obtain copies of specific assessments.

## WHY ARE THERE CONTAMINANTS IN MY WATER?

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 (800-426-4791).

## HOW CAN I GET INVOLVED?

Information regarding the water system is available for review at the Public Services office at 500 Keough Road Capital improvement projects are presented at the Mayor and Board of Aldermen meetings on the 2nd and 4th Mondays of each month. Please feel free to participate in these meetings.

## IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OUR OPERATIONS?

The State and EPA require us to test and report on our water on a regular basis to ensure its safety. The town's water meets all State and Federal water quality requirements. We want you to know that the town abides by all the rules and regulations set forth by the EPA and State of Tennessee.

## OTHER INFORMATION

Approximately every two years the state performs an inspection of our water system known as a sanitary survey. The town's water system scored a 96 on the most recent survey run in 2006, placing our system on the State's approved list of public water supplies. The Town has developed a wellhead protection plan that is on file with the State, to evaluate and prevent potential contaminants from entering the aquifer near our production wells. The wellhead protection plan is available for review in the Public Services offices located at 500 Keough Road, from 7:00 am to 5:00 pm Monday through Friday.

## DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as people 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)

**For more information about your drinking water please contact us at 853-3215.**

**Este informe contiene informacion muy importante. Traduscalo o hable con alguien que lo entienda bien.**

# Water Quality Data

**What does this chart mean?**

- MCLG: Maximum Contaminant Level Goal, or 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
- MCL: maximum Contaminant Level, or 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.
- Discretionary language regarding the use of averages to report levels of some contaminants.
- MRDLG: Maximum Residual Disinfectant Level Goal: 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.
- MRDL: Maximum Residual Disinfectant Level: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for the control of microbial contaminants.

| Contaminant (units) | MCLG | MCL | Level Found | Range of Detection | Violation | Date of Sample | Typical Source of Contaminant |
|---|---|---|---|---|---|---|---|
| **Microbial Contaminants** | | | | | | | |
| Total Coliforms (% positives) | 0 | 5 | 1.67 | 0–1.67 | No | Dec'06 | Naturally present in the environment |
| **Inorganic Contaminants** | | | | | | | |
| Lead (ppb) | 0 | AL=15 | $90^{th}$%=1.8 | nd–5.9 | No | Aug'05 | Corrosion of household plumbing systems; erosion of natural products. We had 0 sites that exceeded the action level. |
| Nitrate (ppm) | 10 | 10 | 0.35 avg. | 0.14-0.50 | No | Mar'06 | Erosion of natural deposits. |
| Fluoride (ppm) | 4 | 4 | 1.03 avg. | 0.90-1.10 | No | Oct'06 | Water additive which promotes strong teeth. |
| Copper (ppm) | 1.3 | AL=1.3 | $90^{th}$%=0.044 | nd-0.056 | No | Aug'05 | Corrosion of household plumbing systems; erosion of natural products. We had 0 exceed the action level. |
| Barium (ppm) | 2 | 2 | 0.0125 avg. | 0.0012-0.013 | No | Jun'06 | Discharge of drilling wastes; discharge from metal refineries: erosion of natural deposits. |
| **Volatile Organic Contaminants** | | | | | | | |
| Chlorine (ppm) | MRDLG=4 | MRDL=4 | 1.22 avg. | 0.10-1.80 | No | Dec'06 | Water additive used to control Microbes. |
| **Synthetic Organic Contaminant** | | | | | | | |
| Total Trihalomethanes (TTHMs) (ppb) | n/a | 100 | 4.37 | 1.15-9.56 | No | Aug'06 | By-Product of drinking water chlorination |
| **Secondary Drinking Water Contaminants** | | | | | | | |
| Chloride (ppm) | n/a | 250 | 6.65 avg. | 5.03-8.0 | No | Jun'06 | n/a |
| Total Dissolved Solids (ppm) | n/a | 500 | 57.0 avg. | 44.0-70.0 | No | Jun'06 | n/a |
| Gross Alpha (pCi/L) | 0 | 15 | 1.58 avg. | BDL-3.3 | No | Nov'06 | Erosion of natural deposits. |
| Gross Alpha - 2 sigma | 0 | 5 | 0.80 avg. | 0.5-1.1 | No | Nov'06 | Erosion of natural deposits. |
| Combined Radium (pCi/L) | 0 | 5 | 1.18 avg. | 0.5-1.9 | No | Nov'06 | Erosion of natural deposits. |
| **Unregulated Contaminants** | | | | | | | |
| Sodium (ppm) | n/a | n/a | 8.35 avg. | 7.7-9.0 | No | Jun'06 | n/a |
| Calcium (ppm) | n/a | n/a | 7.17 avg. | 4.5-10.2 | No | Mar'05 | n/a |
| Alkalinity (ppm) | n/a | n/a | 23.8 avg. | 13-39 | No | Dec'06 | n/a |
| Hardness (ppm) | n/a | n/a | 17.9 avg. | 11.2-25.5 | No | Mar'05 | n/a |

**Lead**: An action level is exceeded when 10 percent of the samples collected have concentrations greater than 15 ppb. 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 the 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. You may choose to flush your tap for 30 seconds to 2 minutes prior to using your tap water. Additional information is available by calling the Safe Drinking Water Hotline at 1-800-426-4791.

**Chlorine**: 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.

**Abbreviations:** • ppb: parts per billion or micrograms per liter • ppm: parts per million or milligrams per liter • n/a: not applicable • NTU: Nephelometric Turbidity Unit, used to measure cloudiness in drinking water • MFL: million fibers per liter, used to measure asbestos concentration. • AL: Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow. • TT: Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.

**About the data:** We monitor for some contaminants less than once per year, and for those detected contaminants, the date of the last sample is shown in the table.