

METRO UTILITY DEPARTMENT # 2

2007 WATER QUALITY REPORT

UTILITY INFORMATION

The Metro Utility Department (MUD) distributes drinking water supplied by the Duck River Utility Commission (DRUC) through the Tullahoma Utilities Board (TUB). The DRUC is a regional water authority and government agency formed in 1976 by the cities of Manchester and Tullahoma to operate a potable water filtration plant and other facilities located on Normandy Reservoir. The DRUC facilities are operated twenty-four hours a day by State certified personnel and can produce up to ten million gallons of drinking water each day.

WATER SOURCE

The DRUC water treatment plant withdraws water from Normandy Reservoir, constructed by TVA in 1976, which is filled by flow from the Duck River. The DRUC, TVA and the Tennessee Department of Environment and Conservation (TDEC) are actively working to protect the reservoir from sources of pollution and assess vulnerability to potential contamination. The TDEC has prepared a Source Water Assessment Program (SWAP) report that assesses the susceptibility of Normandy Reservoir to *potential* contamination and it has been rated as reasonably susceptible (high) based on geological factors and human activities in the vicinity of the reservoir. An explanation of Tennessee's Source Water Assessment Program, the Source Water Assessment summaries, susceptibility scoring and overall TDEC report to USEPA can be viewed online at www.state.tn.us/environment/dws/dwassess.shtml or you may contact the DRUC or TDEC (888-891-TDEC) to obtain copies of specific assessments. In addition, the DRUC has implemented a number of security measures, including 24-hour surveillance and alarms at our facilities to protect against vandalism and other forms of attack.

THE TREATMENT PROCESS

The DRUC water treatment plant utilizes advanced water treatment technology to remove both particulate matter and dissolved contaminants from the water before it is disinfected and pumped to the MUD distribution system. The reservoir water entering the facility is first oxidized and disinfected by the injection of chlorine dioxide. Traditional pretreatment with gaseous chlorine was discontinued in 1988 in favor of chlorine dioxide because it does NOT create certain regulated byproducts. After oxidation and disinfection, particulate matter is coagulated using polyaluminum chloride. The coagulant causes the particles in the water to stick to each other, increasing the overall size and weight of the particles. The water then moves into settling basins where these new larger particles sink to the bottom and are removed. The clarified water then travels into the filtration building where the water is vacuumed through hollow fiber ultrafiltration membranes and then flows through eight huge granular activated carbon contactors. These new filters are designed to remove any remaining particulate matter, even particles smaller than bacteria or viruses. The GAC contactors absorb any remaining organic compounds that could cause objectionable tastes and odors. After charcoal filtration, the water is pH neutralized to prevent corrosion and a chlorine disinfectant residual is added before the water is pumped to the distribution system. Fluoride is also added to prevent tooth decay at the State required level of one part per million.

CUSTOMER COMMITMENT

The MUD, TUB and DRUC are all committed to providing safe and reliable water for all of our customers' needs. The MUD, TUB and DRUC are proud to report that the water produced by the filtration plant met or exceeded all federal and state standards for drinking water during 2006. In fact, the DRUC has never violated any EPA or State standard or regulation since it was formed in 1976.

The DRUC is very proud of the 99.9% average score achieved on inspections by the Tennessee Division of Water Supply over the last 15 years. The MUD, TUB and DRUC employ a staff to manage, operate and monitor water quality and the distribution system including environmental engineers, biologists/chemists and certified system and plant operators. Thousands of tests are conducted each month on water samples at the treatment plant and throughout the distribution systems to ensure that the water remains safe and pure at all times. Over the past ten years, the utilities have invested over \$15,000,000 in upgrades to the treatment facilities, improving both water quality and system reliability.

REQUIRED INFORMATION FROM THE US EPA

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 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). The sources of drinking water (both bottled water and tap water) include rivers, lakes, streams, reservoirs, ponds, 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.

VULNERABLE POPULATIONS

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 food preparation, sanitation and handling of infants or pets as well as 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 toll free at (800-426-4791) or at www.epa.gov/ogwdw.

INFORMATION AND INVOLVEMENT

For more information, contact the Metro Utility Department at (931) 759-4297, Tullahoma Utilities Board at (931) 455-4515 or the Duck River Utility Commission at (931) 455-6458.

ATTENCION

Este informe contiene información muy importante. Tradúscalo o hable con alguien que lo entienda bien