

## Safe drinking water program responsibilities

### Environmental Protection Agency:

- Establish drinking water standards.
- Set methods to monitor, test, and report.
- Funding and assistance for states.
- Conduct research and training.

### State:

- Implement drinking water standards.
- Train and certify water system operators.
- Approve water system plans.
- Issue permits for public water systems.
- Maintain compliance monitoring files.
- Administer enforcement actions.

### Public Water System:

- Locate wells and water intakes.
- Test water, report results and keep records.
- Operate and maintain their water system.
- Treat and deliver safe water.
- Protect water supply sources.
- Notify public when a violation occurs.

### Private Water Supplies:

- Locate and develop well or other supply.
- Operate and maintain water system.
- Test water and maintain records.
- Install and maintain treatment equipment.

**For more information** or if you have questions about safe drinking water please contact:

#### Public Water Supply:

- Local water supplier (City Water Utility, Rural Water District or Private Water District) — See your water bill or phone book.
- KDHE, Division of Environment, Bureau of Water, Public Water Supply Section — Bldg. 283, Forbes Field, Topeka, KS 66620. (785) 296-5514.
- Drinking Water Clearinghouse. (800) 624-8301 Ext. 4.
- Safe Drinking Water Hotline. (800) 426-4791.
- EPA, Region VII, Drinking Water/Groundwater Management Branch — 726 Minnesota Ave., Kansas City KS. 66101 (913) 551-7032.

#### Private Water Supply:

- Local Health Department or County Extension Office—See County Government in the phone book.
- K-State Research and Extension, Dept. of Biological and Agricultural Engineering — 237 Seaton Hall, Manhattan, KS 66506. (785) 532-5813.
- KDHE, Division of Environment, Bureau of Water, Nonpoint Source Section — Bldg. 283, Forbes Field, Topeka, KS 66620. (785) 296-4195.

Publications from Kansas State University are available on the World Wide Web at: <http://www.oznet.ksu.edu>

Contents of this publication may be freely reproduced for educational purposes. All other rights reserved. In each case, credit *How Kansans Obtain Safe Drinking Water*, Kansas State University, July 1998.

Prepared by KDHE in cooperation with



**Kansas State University  
Agricultural Experiment Station  
and Cooperative Extension Service**

MF-2333

July 1998

It is the policy of Kansas State University Agricultural Experiment Station and Cooperative Extension Service that all persons shall have equal opportunity and access to its educational programs, services, activities, and materials without regard to race, color, religion, national origin, sex, age or disability. Kansas State University is an equal opportunity organization. Issued in furtherance of Cooperative Extension Work, Acts of May 8 and June 30, 1914, as amended. Kansas State University, County Extension Councils, Extension Districts, and United States Department of Agriculture Cooperating, Marc A. Johnson, Director.

File code: Engineering 4-5

## PROTECT DRINKING WATER

EMPOWERING LOCAL DECISION MAKERS

I N K A N S A S

## HOW KANSANS OBTAIN Safe Drinking Water



A TOOL TO HELP  
ASSURE QUALITY OF LIFE  
IN LOCAL COMMUNITIES

## Safe Drinking Water

The safety and quality of your drinking water is directly related to where the water came from. Your water may come from either a public water supply or a private water supply. The water source may be from a lake, stream, well, pond, or spring.

### Public water supply

Water provided to the public by a city, rural water district or privately owned water company is considered a public water supply. A business or commercial establishment which has its own water supply is also a public water supply.

- More than 1,100 public water supplies in Kansas serve over 2.1 million people.
- Public water supplies test their water compared to standards set by the Environmental Protection Agency. The public is notified of failure to meet these standards.
- 90 percent of Kansas' public water supplies meet all drinking water standards.

### Private water supply

Water obtained by an individual for use in a single household is a private water supply. Kansas has well construction standards, but no standards apply to water quality from private wells.

- 110,000 houses have private water supplies.
- No federal or state regulations require private water supplies to be tested for quality.
- About one in four private wells have nitrate concentration over the 10 mg/L standard.
- A recent survey found 51 percent of private wells have total coliform bacteria and 18 percent have fecal coliform bacteria.

## Assuring safe drinking water

Public supplies which use lakes or rivers as the source of water are called surface water supplies. All Kansas surface water supplies have a water filtration plant which removes sediment from the water. Most larger water systems also soften the water.

To assure safety from micro-organisms that cause disease, all public water supplies must disinfect the water before it is distributed to customers.

A groundwater supply usually comes from a well(s). The first protection measure applied to groundwater supplies occurs when location of the well is selected, the second when the well is constructed. Since 1975 Kansas has had rules and regulations that water well contractors and landowners must follow when a new well is constructed or an existing well is upgraded. These rules establish construction standards to assure that the well is constructed in a manner that does not permit contaminants to enter the water supply through or beside the well.

Water supplies operated by cities and rural water districts must also be under the supervision of a trained and certified water treatment plant operator. Training is provided through the Kansas Environmental Training System and Kansas Department of Health and Environment (KDHE) administers the tests.

Private water wells constructed by a water well contractor or the landowner must comply with the same construction principles which public water wells must meet.

### Source water protection

Source water protection is an additional means for protecting the quality of the State's drinking water supply. It applies mainly to public drinking water supplies, however, the basic principles can also be applied to private water sources. It is based

on the concept of minimizing the possible contamination and impairment of the water source. Potential hazards which may have influence on the water quality are identified and evaluated and then a plan is developed to prevent hazards from occurring. Specific tools which possibly could be used include zoning, watershed management, wellhead protection, local environmental code adoption (Local Environmental Protection Program), and Local Non-Point Source Pollution Management Plans (Conservation Districts).

Source water protection applies to all public water supplies within Kansas. For surface water, the concept is usually called watershed protection, and for groundwater, it is known as wellhead protection. Regardless of the name, the objective is the same—minimize the chances that activities will contaminate a water supply.

The Safe Drinking Water Act Amendments of 1996 (SDWA) established the Source Water Assessment and Protection Program (SWAP). EPA requires all states to identify the public drinking water sources, assess the quality, determine the susceptibility to contamination, and inform the public of the results. KDHE, along with local individuals, entities, associations, governments, and other interested stakeholders, will develop the program.

Many Kansas communities have identified their water supply sources and are conducting the assessment phase of this program, others have plans to do so. SWAP will enhance these efforts. Since 1985 more than a dozen cities have completed the assessment phase. Ellis County/Hays is the only community to fully implement a Wellhead Protection Plan. **This is a credit to this progressive Kansas community.**