

Farm•A•Syst lends a hand

The Farmstead Assessment System (*Farm•A•Syst*) is a series of worksheets designed to guide private water well users through an assessment of how the various structures and activities near the well site might affect the groundwater quality. Accompanying the worksheets are fact sheets that suggest things that can be done to modify practices that pose a groundwater quality contamination risk. The goal of *Farm•A•Syst* is to help landowners assess well and groundwater vulnerability to contamination and to take steps to protect drinking water supplies. *Farm•A•Syst* is voluntary and information remains confidential.

Home•A•Syst, similar to *Farm•A•Syst*, also is a confidential, self-assessment program. It allows individuals to evaluate their home and property for pollution and health risks. It helps them better understand risks associated with home and property management and how to take preventive action to safeguard their health and the environment.

CITY OF HAYS



WATER QUALITY PROTECTION AREA

For more information or if you have questions about wellhead protection or Ellis County/Hays experience with implementing their wellhead protection plan please contact:

- City of Hays, Public Works—Wellhead Protection, (785) 628-7312.
- Ellis County Environmental Office—(785) 628-9449.
- KDHE, Division of Environment, Bureau of Water, Nonpoint Source Section—Bldg. 283, Forbes Field, Topeka, KS 66620. (785) 296-4195.
- EPA-Region VII, Drinking Water/Groundwater Management Branch—726 Minnesota Ave., Kansas City, KS 66101 (913) 551-7032

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 *Implementing Wellhead Protection*, Kansas State University, July 1998.

Prepared by KDHE in cooperation with



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

MF-2332

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

Implementing Wellhead Protection

ELLIS COUNTY/HAYS



A TOOL TO HELP
ASSURE QUALITY OF LIFE
IN LOCAL COMMUNITIES

Ellis County/Hays set an example

Ellis County and the City of Hays are an excellent example of a successful local government groundwater protection program.

Following 6 years of work by the Wellhead Protection Committee, Ellis County/Hays adopted regulations to protect the public water supplies in unincorporated areas of Ellis County and the City of Hays.

The resulting Ellis County Environmental Code is the state's first wellhead protection plan that has been adopted by a county commission to help protect the public water supply through regulations. The code is administered by the Ellis County Environmental Office.

The Wellhead Protection Area includes all of the incorporated communities in Ellis County and the county's rural water districts. Each Ellis County city has, or is developing, a wellhead protection ordinance based upon the county environmental code.

Elements of the Ellis County Wellhead Protection Area (WHPA) Code

The code includes the following information:

- Purpose and Intent
- Applicability
- Definitions

Code requirements set out specific objectives for how activities will be conducted in the wellhead protection area. The code includes specific requirements for the following items.

- underground petroleum storage tanks
- above ground petroleum storage tanks
- automotive and equipment repair shops

- oil and gas production operations
- underground natural gas and oil lines
- pesticide management
- irrigation tailwater pits
- confined livestock feeding
- wet pits
- landfills and dump sites
- hazardous or radioactive waste
- EPA class IV and V wells
- municipal wastewater treatment plants
- disposal of nonagricultural wastewater treatment sludges
- cemeteries

Code is the result of research

This code is the result of thorough information gathered about land use, well characteristics, and public water well locations. This information was compiled on a county wellhead protection information data base, funded by the Local Environmental Protection Program (LEPP).

Identified were 17 different public water supplies in the county: four city supplies, six rural water districts and seven noncommunity public water supplies (mobile home parks, subdivisions, etc.).

Many sources supplied data

After identifying these water sources, persons that might have information relating to these water supplies were contacted. The contacts, and information sought from each, included:

- Environmental Protection Agency (rules, guidelines)
- Kansas Department of Health and Environment (KDHE), Bureau of Water (well logs, water databases, well permits, livestock permits) and Bureau of Environmental Remediation (contamination sites, storage tanks)

- KDHE, Northwest District Office (site identification forms, inspection reports)
- Kansas Department of Agriculture, Division of Water Resources (water rights, water use data)
- Kansas Corporation Commission, District Office (resource production, disposal wells, injection wells, spills)
- Kansas Geological Survey (topographic and pipeline maps)
- Kansas Department of Transportation (local maps)
- Federal Emergency Management Agency (flood maps)
- USDA, Farm Service Agency (aerial photos)
- Ellis County, Conservation District (nonpoint source pollution, soil classification)
- Wellhead Protection Committee (wellhead protection plan)
- The cities of Hays, Victoria, Ellis and Schoenchen (well information)
- Rural Water Districts (water use reports, well drilling dates, property owners)
- Landowners and other residents (private water supply wells and other sources)
- Owners of noncommunity public systems (well information)

Inspections verify information

A site inspection was conducted at each public supply well to verify the data and to identify any information that might not have been included.

Examples of information include verifying site location, travel routes, surrounding land use, location of oil production facilities, and distances to potential contamination sources. Pictures were taken at the time of the inspection at each site.

To assure this data base remains a viable documentation of activity near the wellhead, the data base will be updated on an ongoing basis.