



Nonpublic Household Water Well Recommendation #9:

Establish a Three-Part Process: Permitting, Inspection, and Water Quality Testing

Proposed Action

1. After a nonpublic household water well is constructed or reconstructed, and a pump is installed, but before it is put into use by the owner, a local environmental health professional or other designated local official will inspect the well and pump to ensure it is sufficient and will then sample the well water and submit sample(s) to a drinking water KDHE-certified lab for analysis to ensure that the well water used for household purposes meets established water quality requirements.
2. Standard state and local guidelines for water quality sampling and analysis of water from nonpublic household water well will be amended to include:
 - Total coliform bacteria,
 - Nitrates,
 - Pesticides and/or VOCs, or other organic chemicals, and
 - Other contaminants, depending on local conditions (e.g., arsenic, uranium).
3. Recommended state and local water quality analysis guidelines will be amended to include:
 - Lead and other metals (e.g., arsenic, mercury, cadmium),
 - Nuisance contaminants: chloride, copper, iron, manganese, sulfates, total dissolved solids (TDS) and zinc,
 - pH, hardness, hydrogen sulfide, and salinity, and
 - Other contaminants, depending on local conditions.

Potential Funding

Funding to support this recommendation would most likely come from a combination of sources, including: nonpublic water well users; local water well permits; state funding; local and state taxes; and a percentage of fertilizer and pesticide sales.

Background Information

Developing standard requirements for nonpublic household water well inspections that include both a physical inspection of the well and an analysis of water quality would ensure that the well itself is properly constructed and maintained, and that the well water is safe for household purposes. Groundwater is the major source of drinking water for 70% of Kansas residents. In rural areas, 85% of the population relies on groundwater.

Poor water quality is not specific to nonpublic water wells. Even *public* water systems are dealing with contaminated water. For example, Quinter, Kansas experienced petroleum odors in their public water system wells. The source of the odors and ground water contamination was from gasoline leaks and spills into the groundwater from a nearby service station. This contamination issue ultimately required that the city construct a replacement well for the city's water supply.

Why This Action Is Needed

Groundwater is often contaminated. Many aspects of well construction or reconstruction are inspected. However, there is no requirement for nonpublic household water well owners or users to have the *water quality* tested after the construction or rehabilitation of a nonpublic water well.



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