# Sanitation/Environmental Code of Lyon County, Kansas <u>Chapter 3</u>

# **Water Supplies**

# 3-1.0 PURPOSE AND INTENT

To the extent that public health will be protected and the safeness and quality of the water resources of Lyon County are preserved, the provisions of this chapter of the Sanitation/Environmental Code are to regulate and control construction, development, maintenance, abandonment and use of all domestic water supplies other than public water supplies within the legal boundaries of Lyon County, Kansas (See Appendix C)

#### 3-1.1 Title.

This chapter shall be known and referred to as the Water Supplies Code.

#### 3-2.0 APPLICABILITY

The procedures prescribed in this chapter must be followed in administering this code and any amendments thereto. Except as otherwise roted, provisions **shall apply to all** lands located in unincorporated areas of Lyon County, Kansas, which contain 10 acres or less, or a residential site, or land not used for agricultural purposes under the ownership of one person as defined in Section 14.12. Except as otherwise noted, water supplies used only for agricultural purposes are exempt from this code. Such wide application of this code is necessary to protect the health of the inhabitants of Lyon County and the waters of the State of Kansas.

#### 3-3.0 EFFECTIVE DATE

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## 3-4.0 COMPLIANCE REQUIRED

After the effective date of this code, no person shall construct on any property subject to this Sanitation/Envi ronmental Code, any public, semi-public, or private water supply that does not comply with the requirements of this Sanitary Code.

## 3-5.0 DEFINITIONS

#### **3-5.1** Abandoned Well means any well:

- which has been permanently discontinued from use;
- from which the pumping equipment has been permanently removed;
- which is in such a state of disrepair that it cannot be used to supply water, or it has the potential for transmitting surface contaminants into the aquifer or both;
- which possesses potential health and safety hazards; or
- which is in such a condition it cannot be placed on active or inactive status (Refer to Sections 3-13-0 and 3-14.0).
- **3-5.2 Backflow** means a situation whereby water, gases or other substances from one water source might enter and flow back into a second water supply or system.
- **3-5.3 Backpressure** means a situation in which the pressure in a first water supply or system becomes greater than that of a second water supply or system and causes water, fluids or other substances from the first supply or system to be pushed backward into the second water supply or system.
- **3-5.4 Backsiphonage** means a situation in which the pressure in a first water supply or system becomes less than that of a second water supply or system; and water, fluids, or other substances from the second water supply or system are drawn backward into the first water supply or system.

- 3-5.5 <u>Cistern</u> means a reservoir that was originally designed to collect and store rainwater from roof runoff or collect and store water from another source for domestic purposes.
- 3-5.6 <u>Cross-connection</u> means any connection or arrangement, direct or indirect, physical or otherwise, between a potable water supply system and non-potable water supply, including any: plumbing fixture, waste pipe, soil pipe, sewer, drain, device, other system, tank, receptacle, or other equipment, through which it may be possible for non-potable, used, unclean, polluted or contaminated water, or contaminated fluids including gases or other substances, to enter into any part of such potable water system under any condition.
- **3-5.7 Domestic Purpose** means the use and/or consumption of water by any person or family unit or household for household purposes.
- 3-5.8 <u>Potable Water</u> means water free from impurities in amounts sufficient to cause disease or harmful physiological effects in humans and conforming with latest EPA National Primary Drinking Water Standards.
- 3-5.9 <u>Private Water Supply</u> means all water supplies used for domestic purposes serving less than three service connections and not meeting the definition of a Public or Semi-Public Water Supply.
- **Public Water Supply** means a water supply that is used for domestic purposes by ten or more users or serves an average of twenty-five (25) individuals daily at least sixty (60) days out of the year (K.S.A. 65-162a(b)).
- **3-5.11 Semi-Public Water Supply** means all water supplies not meeting the definition of public water supply, and serving three or more service connections including rental properties or properties under separate ownership.
- **3-5.12** <u>Water district</u> means any special district authorized and empowered by state statutes to plan, construct and/or operate a public water supply system.

#### 3-6.0 REQUIREMENTS FOR PUBLIC WATER SUPPLIES

#### 3-6.1 State permit.

Any person operating a public water supply shall obtain a public water supply permit from the Kansas Department of Health and Environment.

#### 3-6.2 State Approved Plans.

Any person planning to construct or permit to be constructed, on any property subject to the provisions of this Sanitation Code, any public water supply shall have plans and specifications for such supply submitted to and approved by the Kansas Department of Health and Environment.

#### 3-6.3 Role of the Board of Lyon County Commissioners.

The Board of Lyon County Commissioners shall be notified and also have the right to examine plan specifications for public water supplies pursuant to K.S.A. 82a-614.

#### 3-7.0 REQUIREMENTS FOR SEMI-PUBLIC WATER SUPPLIES

#### 3-7.1 Inspections.

Inspections shall be required for any development, alteration, sale, lease or use of a semi-public water supply for domestic purposes. Assurance of water rights is required and is the responsibility of the landowner. Following inspection approval, a permit shall be issued by the Administrative Agency. Inspections shall also be required for any maintenance or alteration to the well casing.

#### 3-7.2 Restrictions.

Use of surface water (lakes, ponds or streams) as a source of water for a semipublic water supply is not permitted:

- 1) where a satisfactory groundwater source is available,
- unless adequate treatment is provided (In no case shall surface water be used without filtration and chlorination or other acceptable disinfectants.),
   and

3) where the pond or lake receives any drainage or discharges from septic tanks, sewage treatment plants, agricultural lagoons, landfills, or other source determined by the Administrative Agency to create an unreasonable risk to public health.

#### 3-7.3 <u>Fees.</u>

The Administrative Agency may collect a fee as established in Section 1-5.3.5 of this code.

#### 3-7.4 Approved Plans.

Prior to construction, a plan in both written and map form to drill, develop, or construct a semi-public water supply on any premise subject to regulations of this sanitation/environmental code must be submitted to the Administrative Agency for approval. References approved by Kansas Department of Health and Environment must be used as a guide in reviewing and approving plans for semi-public water supply systems.

#### 3-7.5 <u>Maintenance.</u>

The owner is responsible for maintaining the semi-public water supply system in the condition as established in the approved plan.

#### 3-7.6 Use Prohibition.

The semi-public water supply shall not be connected to any public water supply system on any property that is served by a public water supply.

#### 3-7.7 <u>Semi-public Water Supplies.</u>

The owner(s) of the land on which the semi-public water supply well is located and/or the assigned operator shall:

- maintain all water wells in accordance with minimum standards as described in this code; and,
- 2) disinfect the water delivered to the connections so that it meets EPA Primary Drinking Water Standards by chlorination or other means as approved by the Administrative Agency; and,

- 3) test for bacteriological quality a minimum of two (2) times every year; and
- 4) test more frequently or for different parameters when evidence is brought forth which indicates more frequent or additional testing is necessary to protect the health of the users or to determine if a situation exists which may adversely affect the health of the users, and,
- 5) notify users in writing immediately when evidence exists that water has become or may become contaminated by microbes or chemicals.

#### 3-8.0 REQUIREMENTS FOR PRIVATE WATER SUPPLIES

#### 3-8.1 Inspections.

Inspections shall be required for property sale, property leases, or new construction of a private water supply for domestic purposes. Inspections shall also be required for any maintenance or alteration to the well casing.

#### 3-8.2 Restrictions.

Except for agricultural purposes, use of surface water (lakes, ponds or streams) as a source of water for a private water supply is not permitted:

- 1) where a satisfactory groundwater source is available,
- unless adequate treatment is provided (In no case shall surface water be used without filtration and chlorination or other acceptable disinfectants), and
- 3) where the pond or lake receives any drainage or discharges from septic tanks, sewage treatment plants, agricultural lagoons, landfills, or other source determined by the Administrative Agency to create an unreasonable risk to public health.

#### 3-8.3 Fees.

Any person who shall drill, develop, construct, buy, sell, lease,  $\sigma$  cause to be used any private water supply or shall conduct maintenance on the well casing of any private water supply on any premise subject to regulations of this

sanitation/environmental code shall obtain prior approval from the Administrative Agency. The Administrative Agency may collect a fee as established in Section 1-5.3.5 of this code.

#### 3-8.4 Approved Plans.

Prior to construction, a plan in both written and map form to drill, develop, or construct a private water supply on any premise subject to regulations of this sanitation/environmental code shall be submitted. Approval shall not be given until the plans showing the location and construction of the supply have been submitted in written and map form to the Administrative Agency for approval.

#### 3-8.5 Maintenance.

The owner is responsible for maintaining the private water supply system in the condition as established in the approved plan.

#### 3-8.6 Use Prohibition.

The private water supply must not be connected to any public water supply system on any property that is served by a public water supply.

## 3-9.0 MINIMUM STANDARDS FOR GROUND WATER SUPPLIES

(See Appendix C)

#### 3-10.0 WATER DISTRICTS

# 3-10.1 <u>Total Separation of Public Water Supplies and Private and Semi-Public Water Supplies Required.</u>

A total and complete separation must be maintained between any public water supply and any private water supply well, semi-public water supply well, or any other source of non-potable water or source of potential pollution.

#### 3-10.2 Inspection.

The Administrative Agency must inspect or require to be inspected at the time of sale or property transfer all homes to assure there is no cross-connection between a private or semi-public system and a public system.

#### 3-10.3 <u>Cross-connection</u>, <u>Backflow</u>, <u>Backpressure</u>, <u>and Backsiphonage</u> <u>Prevention Devices Required</u>.

Cross-connection, backflow, backpressure, and backsiphonage prevention devices must be used where needed to prevent or reduce the risk of contamination of public water supplies. Examples of locations where cross-connection, backflow and backsiphonage devices would be appropriate include but are not limited to: hose bibs (outside faucets), buried lawn sprinkler systems, toilet tanks, livestock tanks, boilers, chemical dispensers directly connected to the water supply, and automated watering devices. Filling of chemical tanks requires an appropriate air gap.

# 3-11.0 CROSS-CONNECTION, BACKFLOW, AND BACKSIPHONAGE PROTECTION OF GROUNDWATER

3-11.1 Backflow, backpressure, and backsiphonage prevention devices shall be used where needed in private and semi-public water supply systems to prevent or reduce the risk of contamination of the groundwater. Examples of locations where backflow and backsiphonage devices would be appropriate include but are not limited to: hose bibs (outside faucets), buried lawn sprinkler systems, toilet tanks, livestock tanks, and automated watering devices. Filling of chemical tanks requires an appropriate air gap.

# 3-12.0 INJECTION WELLS, MONITORING WELLS AND WATER WELL TEST HOLES

#### 3-12.1 Records Required.

Except in those situations prohibited by state law, any person drilling any injection well, monitoring well, geothermal well, or any water well test hole shall document proper plugging by submitting plugging information to the Administrative Agency within one month after the well has been plugged. Required information shall be that established by the Kansas Department of Health and Environment.

#### 3-12.2 Well data required.

Any data collected as the result of development and monitoring of an injection well or monitoring well shall be submitted to and retained by the Administrative Agency within one month after the date the data is collected.

# 3-13.0 ABANDONED WELLS (AND ABANDONED CISTERNS)

3-13.1 Identification of abandoned wells (and cisterns) which pose a threat to ground water supplies will only occur through receipt of complaints or inspection of property at the time of sale or transfer. Inquiry and education regarding abandoned wells (and cisterns) will occur at the time of other inspections of property required by this code.

Wells determined to be abandoned based on Section 35.1 shall be plugged in accordance with K.S.A. 82a-718 or guidelines provided by the Kansas Department of Health and Environment. Copies of all required state forms shall be submitted to the Administrative Agency.

The plugging of cisterns shall be accomplished following guidelines set forth in Kansas State University Bulletin *Plugging cisterns, cesspools, septic tanks, and other* holes.

## **3-14.0 WELLS ON INACTIVE STATUS**

- 3-14.1 Landowners must make application with both the Kansas Department of Health and Environment and the Administrative Agency to maintain wells on an inactive status instead of plugging the well. Copies of all forms required by the Kansas Department of Health and Environment must be a part of the application with the Administrative Agency. In no case may the Administrative Agency approve inactive status unless prior approval is received from the Kansas Department of Health and Environment. The Administrative Agency must not allow the property owner to place a well on inactive status for a period of longer than five years. To receive inactive status the landowner must present evidence to the Administrative Agency as to the condition of the well and as to the landowner's intentions to use the well in the future. As evidence of intentions, the owner is responsible for properly maintaining a well in the following manner:
  - The well shall be grouted and the annular space between the hole and the casing must have no defects that will permit the entrance of surface water or vertical movement of subsurface water into the well unless a variance is provided by the Kansas Department of Health and Environment:
  - 2) The well shall be clearly marked and shall not be a safety hazard;
  - 3) The top of the well shall be securely capped in a watertight manner and shall be adequately maintained in such a manner as to prevent easy entry by other than the landowner or the landowner's designee;
  - 4) The area surrounding the well shall be protected from any potential sources of contamination within a 50-foot radius and meet the requirements established in Table I (Appendix C);

- 5) If the pump, motor or both, have been removed for repair or replacement, the well shall be maintained to prevent injury to people and to prevent the entrance of any contaminant or other foreign material;
- 6) The well shall not be used for disposal or injection of trash, garbage, sewage, wastewater, storm runoff, or other potential pollutants; and
- The well shall be easily accessible to routine maintenance and periodic inspection.

After a period of five years, if the well has not been brought up to current standards and is not in use, the well must be properly abandoned according to minimum guidelines established by the Kansas Department of Health and Environment.

(K.A.R. 28-30-2(c)(1) through (5) and 28-30-7.)

#### **3-15.0 VARIANCE**

In unusual cases where compliance with the requirements of this code is not feasible, the Administrative Agency has the authority to waive the requirement provided reliable written data is furnished to show that such waiver does not and will not impair the potability of the water or otherwise endanger the health and safety of the individuals using the supply or the general public.

In no case may the Administrative Agency waiver requirements established by the Kansas Department of Health and Environment in K.A.R. 28-30-5.

This resolution is adopted by the Board of County Commissioners of Lyon							
County, Kansas this	<u>th</u> day of	, 2004.					

Chairperson, Lyon County Commission	
Member, Lyon County Commission	
Member, Lyon County Commission	