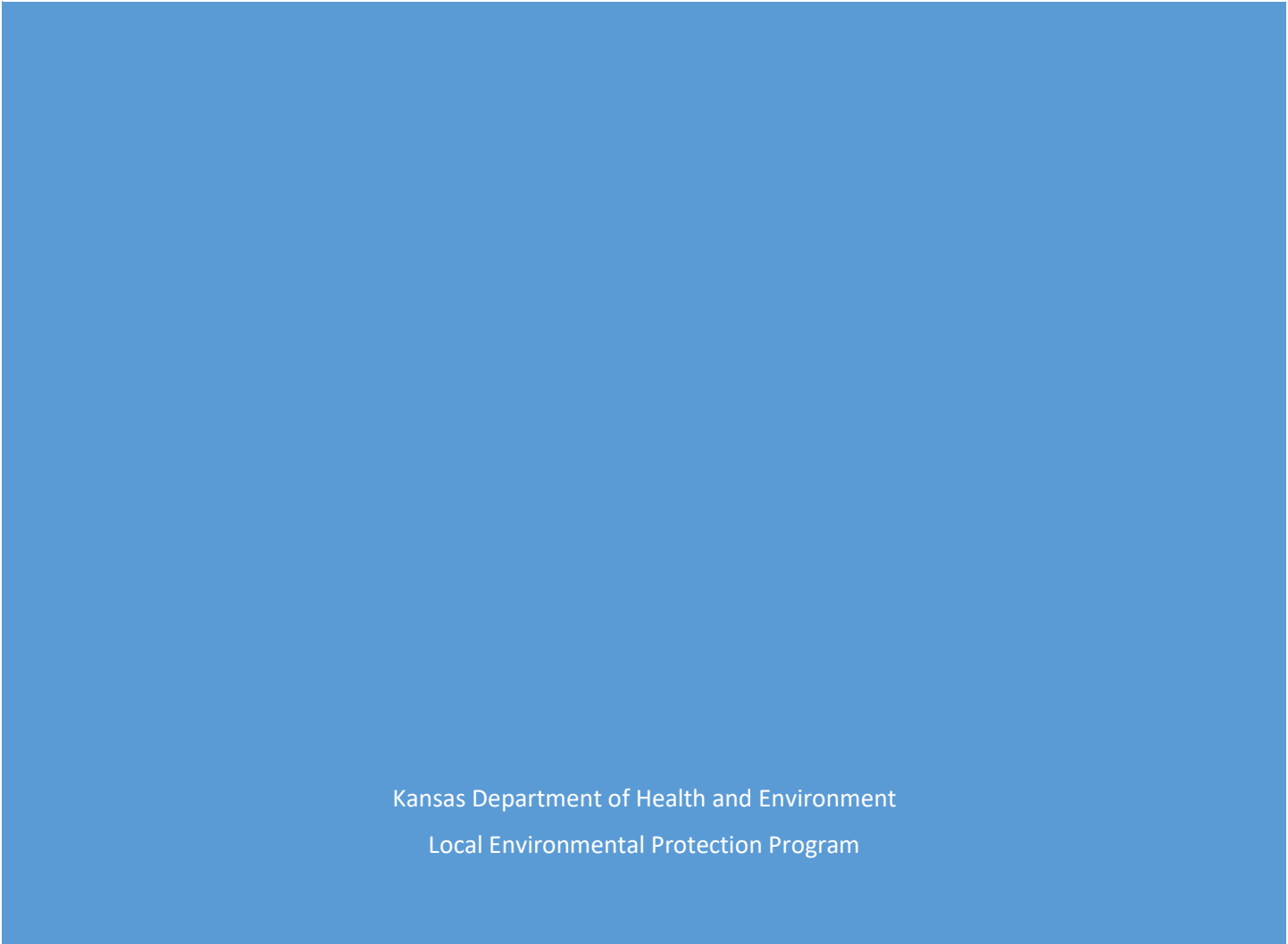




# MODEL COUNTY SANITARY CODE



Kansas Department of Health and Environment  
Local Environmental Protection Program

**TABLE OF CONTENTS**

**TABLE OF CONTENTS**..... 0

**CHAPTER I** ..... 6

**POLICY, ADMINISTRATION AND ENFORCEMENT**..... 6

ARTICLE I..... 6

GENERAL PROVISIONS ..... 6

**Section 1. Title** ..... 6

**Section 2. Legal Authority** ..... 6

**Section 3. Findings and Declaration of Policy** ..... 6

**Section 4. Purpose** ..... 6

**Section 5. Jurisdiction and Application** ..... 6

**Section 6. Public Health Jurisdiction and Application**..... 7

**Section 7. Severability** ..... 7

**Section 8. Disclaimer of Liability** ..... 7

**Section 9. Amendments and Additions** ..... 7

**Section 10. Repeal and Supersede Effect** ..... 7

**Section 11. Effective Date**..... 8

ARTICLE II ..... 8

ADMINISTRATION..... 8

**Section 1. Administrating Authority [Administrative Agency]** ..... 8

**Section 2. Administrative Actions and Decisions** ..... 8

**Section 3. Interpretation of Terms or Words**..... 8

**Section 4. Technical and Scientific Terms** ..... 9

**Section 5. Vested Interests**..... 9

**Section 6. Compatibility with Other Laws** ..... 9

ARTICLE III..... 9

PERMITS AND LICENSES..... 9

**Section 1. Permits and Licenses**..... 9

**Section 2. Supplemental to State Regulations**..... 12

**Section 3. Administration of State Requirements** ..... 12

ARTICLE IV ..... 12

INSPECTIONS AND INVESTIGATIONS..... 12

**Section 1. Inspections Required**..... 12

Section 2.	<b>Inspection Reports</b> .....	12
Section 3.	<b>Inspection Scheduling</b> .....	13
Section 4.	<b>Property Transfer Inspections</b> .....	13
ARTICLE V.	.....	14
ENFORCEMENT PROCEEDINGS	.....	14
Section 1.	<b>Emergency Orders</b> .....	14
Section 2.	<b>Suspension of Permit or License</b> .....	14
Section 3.	<b>Revocation of Permit or License</b> .....	15
Section 4.	<b>Abatement of Nuisances</b> .....	15
ARTICLE VI.	.....	15
APPEALS.	.....	15
Section 1.	<b>Appeal for Hearing</b> .....	15
Section 2.	<b>Hearing Officer</b> .....	16
Section 3.	<b>Conduct of Hearing</b> .....	16
Section 4.	<b>Application of State Law Procedures</b> .....	16
ARTICLE VII.	.....	16
VIOLATIONS AND PENALTIES	.....	16
Section 1.	<b>Prohibited Practices and Unlawful Conduct</b> .....	16
Section 2.	<b>Penalties</b> .....	17
Section 3.	<b>Prosecution</b> .....	18
ARTICLE VIII.	.....	18
CODE VARIANCE	.....	18
Section 1.	<b>Variances</b> .....	18
ARTICLE IX.	.....	19
DEFINITIONS.	.....	19
Section 1.	<b>Definitions</b> .....	19
<b>CHAPTER II. WASTEWATER DISPOSAL</b>	.....	23
ARTICLE I.	.....	23
GENERAL PROVISIONS	.....	24
Section 1.	<b>Purpose</b> .....	24
Section 2.	<b>Scope</b> .....	24
Section 3.	<b>Requirements for Subdivision Development</b> .....	24
Section 4.	<b>Rules of Application</b> .....	24

ARTICLE II.....	26
PUBLIC WASTEWATER DISPOSAL SYSTEMS .....	26
Section 1.    Regulation of Municipal or Public Systems.....	26
Section 2.    Policy Regarding Public Wastewater Systems.....	26
ARTICLE III.....	26
PRIVATE ONSITE WASTEWATER TREATMENT AND DISPOSAL SYSTEMS.....	26
Section 1.    Types .....	26
Section 2.    Proper Maintenance and Operation.....	27
Section 3.    Location of an Onsite Wastewater System.....	27
Section 4.    Location of Onsite Wastewater Systems Below Flood/Full Pool.....	28
Section 5.    Location of Onsite Wastewater Disposal Systems Within a 100-Year Floodplain ..	28
Section 6.    Connections to Public Wastewater Disposal Systems .....	28
Section 7.    Repairs and Corrections .....	28
Section 8.    General System Requirements.....	28
Section 9.    Alternative Sewage Treatment Systems (ASTS) .....	29
Section 10.   Application Procedure .....	29
Section 11.   Field Data Requirements .....	30
Section 12.   Plans and Specifications.....	30
Section 13.   Inspection Required for System Approval .....	31
Section 14.   Applicable Building Codes.....	31
Section 15.   Abandoned System Requirements.....	31
ARTICLE IV.....	32
REQUIREMENTS FOR ONSITE WASTEWATER ABSORPTION SYSTEMS .....	32
Section 1.    Permits Required .....	32
Section 2.    General System Requirements.....	32
Section 3.    Application Requirements .....	32
Section 4.    Construction Specifications .....	32
Section 5.    Inspection Requirements .....	35
ARTICLE V.....	35
REQUIREMENTS FOR MOUND SYSTEMS.....	36
Section 1.    Permits Required .....	36
Section 2.    Permit Qualification .....	36
Section 3.    General Requirements and Standards.....	36

<b>Section 4. Design</b> .....	36
ARTICLE VI.....	36
REQUIREMENTS FOR COMPOSTING/WATERLESS TOILETS.....	36
<b>Section 1. Permits Required</b> .....	36
<b>Section 2. Permit Qualifications</b> .....	37
<b>Section 3. Privies and Waterless Toilets</b> .....	37
ARTICLE VII.....	37
REQUIREMENTS FOR HOLDING TANKS.....	37
<b>Section 1. Permits Required</b> .....	37
<b>Section 2. Permit Qualifications</b> .....	37
<b>Section 3. General Requirements and Design</b> .....	38
<b>Section 4. Change in Use</b> .....	39
ARTICLE VIII.....	39
REQUIREMENTS FOR WASTEWATER STABILIZATION PONDS.....	39
<b>Section 1. Permits Required</b> .....	39
<b>Section 2. Wastewater Lagoon Design Requirements</b> .....	39
<b>Section 3. Wastewater Lagoon Separation Distances</b> .....	41
ARTICLE IX.....	41
REQUIREMENTS FOR OTHER SYSTEMS.....	41
<b>Section 1. Permits Required</b> .....	41
<b>Section 2. Permit Qualifications</b> .....	42
ARTICLE X.....	42
REQUIREMENTS FOR ONSITE WASTEWATER SYSTEM INSTALLERS.....	42
<b>Section 1. License Required</b> .....	42
<b>Section 2. License Term and Renewal</b> .....	42
<b>Section 3. Standards of Performance</b> .....	43
<b>Section 4. Certificate of Insurance</b> .....	43
<b>Section 5. Code Compliance</b> .....	43
<b>Section 6. License Revocation</b> .....	43
ARTICLE XI.....	43
REQUIREMENTS FOR SANITARY DISPOSAL SERVICE OPERATORS.....	43
<b>Section 1. License/Permit Required</b> .....	43
<b>Section 2. License/Permit Term and Renewal</b> .....	44

Section 3.	Standards of Performance .....	44
Section 4.	License Revocation.....	45
ARTICLE XII.	.....	45
REQUIREMENTS FOR ONSITE WASTEWATER SYSTEM AND WATER WELL INSPECTORS	...	45
Section 1.	License Required .....	46
Section 2.	License Term and Renewal.....	46
Section 3.	Standards of Performance .....	46
Section 4.	Inspector’s Bonds .....	46
Section 5.	Certificate of Insurance .....	46
Section 6.	License Revocation.....	46
CHAPTER III	GRAYWATER.....	46
ARTICLE I.	.....	47
GRAYWATER SYSTEMS	.....	47
Section 1.	General System Specifications .....	47
Section 2.	Plumbing Specifications.....	47
Section 3.	Subsurface Drip Irrigation Specifications .....	47
Section 4.	Tank and Pump Specifications.....	48
Section 5.	Variance Requests .....	49
Section 6.	Best Practice Recommendations .....	49
Section 7.	Definitions of Specification for Chapter III:.....	50
CHAPTER IV.	Water Supplies .....	51
ARTICLE III.	.....	54
STANDARDS & REQUIREMENTS	.....	54
Section 6.	Minimum Standards for Groundwater Supplies.....	56
Section 7.	Requirements for Subdivision Development.....	56
Section 8.	Water Well Pump Installer and Maintenance Licensure. ....	56

# CHAPTER I

## POLICY, ADMINISTRATION AND ENFORCEMENT

### ARTICLE I

#### GENERAL PROVISIONS

**Section 1. Title**

This Code shall be known and referred to as the \_\_\_\_\_ County Environmental Sanitary Code.

**Section 2. Legal Authority**

This Code is adopted under the authority granted to the Board of County Commissioners under application of Federal Law and the Laws of the State of Kansas, including K.S.A. 19-3701 et seq., as amended, and pursuant to the powers and authorities of the Board of County Commissioners under K.S.A. 19-101a; and Sec. 5 of Article 12 of the Kansas Constitution and by K.S.A. 12-3301 et seq., if adopted by any city.

**Section 3. Findings and Declaration of Policy**

A fundamental duty of every government is the protection of the health and safety of its citizens and to thereby promote the public welfare. Consequently, the Board of County Commissioners hereby finds, determines and declares that it is necessary to adopt a uniform system of rules, regulations and standards to eliminate and prevent environmental conditions that are or may be hazardous to the public health, safety and welfare and to thereby promote the safe, economical and orderly development and conservation of the land and resources of the County.

**Section 4. Purpose**

The purpose of this Code is:

- A. To promote the public health, safety, comfort and well-being of the public; and
- B. To prescribe the procedures to be followed in administering this Code; and
- C. To prescribe rules, regulations, standards and enforcement procedures to minimize, control, or eliminate potential or actual sources or causes of disease, infection, contamination or pollution, whether in food, solid waste, sewage, air, water or other media; and
- D. To protect the integrity of water, air, soil, and natural resources, including aquatic biota, flora, fauna, and wildlife through the prevention of pollution and degradation of the environment by regulation of activities which may affect environmental conditions.

**Section 5. Jurisdiction and Application**

This Code and all authorized rules, regulations, restrictions and requirements shall apply from and after the effective date of adoption, to and throughout the unincorporated areas of \_\_\_\_\_ County, Kansas, and to all persons, property, establishments and business activities located or conducted, regardless of ownership and acreage, within \_\_\_\_\_ County, Kansas and outside the municipal boundaries of any City.

**Section 6. Public Health Jurisdiction and Application**

This Code and any or all rules, regulations, restrictions and requirements shall apply to and throughout all areas of \_\_\_\_\_ County, Kansas, including those areas located within the municipal boundaries of any City, whenever authorized or required under application of the Laws of the State of Kansas or of the United States, whether by statute, contract, rule or regulation, or pursuant to the jurisdiction of the \_\_\_\_\_ County Board of County Commissioners.

**Section 7. Severability**

If any clause, sentence, paragraph, section or subsection of this Code shall be adjudged invalid for any reason whatsoever, such judgement shall not affect, repeal or invalidate the remainder thereof, but shall be confined to the clause, sentence, paragraph, section or subsection thereof found to be invalid.

**Section 8. Disclaimer of Liability**

This Code shall not be construed or interpreted as imposing upon the County, or its officials or employees: (1) any liability or responsibility for damages to any property; or (2) any warranty that any installation, system, or portion thereof that is constructed or repaired under permits or inspections required by this Code will function properly. In addition, any employee charged with enforcement of this Code, who acts in good faith and without malice in the discharge of his or her duties, shall not thereby be personally liable and is hereby relieved from personal liability for damage which may occur to any person or property as a result of the discharge of his or her duties.

**Section 9. Amendments and Additions**

This Code may be supplemented or its provisions may be amended by Resolution adopted by the Board of County Commissioners, as provided by K.S.A. 19-3705, and any such amendments or additions shall be incorporated within and codified as a part of this Code. Any changes, modifications or additional provisions adopted and imposed by State or Federal Law, rule or regulation which are applicable to and administered through the jurisdiction of \_\_\_\_\_ County, Kansas, shall be incorporated within and made a part of this Code, as authorized by State or Federal law.

**Section 10. Repeal and Supersede Effect**

This Code shall supersede any and all previously adopted Resolutions or regulations, which are, in whole or in part, in conflict with any provision of this code, where applicable, and any rule, regulation or resolution which is or was in effect upon the effective date of this Code shall be repealed to the extent necessary to give this Code full force and effect, and in the case of any conflict of provisions, whether real or apparent, then the provisions of this Code shall govern wherever applicable.



**Section 11. Effective Date**

This Code shall become effective from and after the date of adoption by the Board of County Commissioners, or other appropriate jurisdiction, and publication of notice as required by law.

## ARTICLE II ADMINISTRATION

**Section 1. Administrating Authority [Administrative Agency]**

Unless otherwise specifically designated within a separate and particular Chapter or Article of this Code, the [Administrative Authority], and/or designees, shall have the primary authority and responsibility for the administration of this Code.

Under the authority of any particular Chapter or Article of this Code, the [Administrative Authority] may implement such administrative procedures, consistent with this Code, as deemed necessary for the effective administration of any regulations or which may be required or imposed under application of the laws of the State of Kansas or the United States.

The Board of County Commissioners may designate code enforcement officers who shall be responsible for the enforcement of all provisions of this Code in coordination with the [Administrative Authority] or his or her designees.

**Section 2. Administrative Actions and Decisions**

It is the intent of this Code to establish regulations and standards for the protection of the public health and safety. To the extent possible, all administrative actions and decisions required or authorized for the administration of this Code shall be made solely in accordance with the standards enumerated in the Code. Whenever, in the course of administration, it is necessary to make an administrative decision or take action for which standards are not provided, then the decision or action shall be made according to the purpose and intent of this Code so that the result will best serve the public health and safety.

**Section 3. Interpretation of Terms or Words**

All terms and words used in this Code shall be interpreted and given meaning according to their common understanding and to provide reasonable application of the purpose and intent of the Code. Whenever the context requires, in the application of this Code, the terms and phrases used shall be interpreted in the following manner:

- A. Words appearing in the singular number shall include the plural, and those appearing in the plural shall include the singular.
- B. Words used in the present tense shall include the past tense and future tense, and words used in the future tense shall include the present and past tense.
- C. The word “shall” is mandatory; and the word “may” is permissive.

- D. The phrase “this Code” shall refer to the Code and all the authorized rules, regulations, restrictions and requirements and the phrase “the regulations” shall include rules, regulations, restrictions and requirements authorized by the Code.

**Section 4. Technical and Scientific Terms**

Unless otherwise defined, any technical or scientific term used within this Code or within any rule, regulation, restriction or requirement shall be given the meaning most commonly known and applied within the appropriate literature of manuals applicable for that science, industry or technological skill.

**Section 5. Vested Interests**

Nothing contained in this Code or any regulations shall be deemed or construed to grant any vested interest or protected right to any person beyond the express limited terms of any permit or ruling issued under this Code, and the Code and regulations are expressly declared to be subject to amendment, change or modification.

**Section 6. Compatibility with Other Laws**

Nothing contained in this Code or any regulations shall be deemed to alter or modify the application of any other laws, codes or regulations which are or may be applicable to the property, use, business activity or other object or matter regulated under this Code, and any permit, approval or other condition given or acknowledged under this Code shall be limited in effect to the requirements of this Code and shall not, under any circumstance, relieve the holder from compliance with all other applicable laws, codes, regulations or requirements.

## ARTICLE III

### PERMITS AND LICENSES

**Section 1. Permits and Licenses**

No person shall conduct, carry-on or perform any business or activity identified in this section without first having obtained a valid permit or license in conformance with the requirements of this code.

- A. **Onsite Wastewater Disposal System – Permit Required.** Every person who installs, removes, alters, repairs or replaces, or causes to be installed, removed, altered, repaired or replaced any onsite wastewater disposal system or part thereof shall, prior to commencement of any work, apply for and obtain a permit to perform such work and no onsite wastewater disposal system shall be installed, removed, altered, repaired or replaced except pursuant to a permit issued under this article.
- B. **Onsite Wastewater System Installer – License Required.** Every person who conducts the activity of an Onsite Wastewater System Installer, as defined in Chapter II of this code, shall apply for, obtain and maintain a valid license to perform that activity.

- C. **Sanitary Disposal Service Operator – License Required.** Every person who engages in or conducts the activity of a Sanitary Disposal Service Operator, as defined in Chapter II of this code, shall apply for, obtain and maintain a valid license to perform that activity.
- D. **Wastewater System Inspector and/or Water Well Inspector – License Required.** Every person who engages in or conducts the activity of a Wastewater Inspector and/or Water Well Inspector, as authorized in Chapter II of this code, shall apply for, obtain and maintain a valid license to perform that activity.
- E. **Disposal.** Waste materials removed from onsite wastewater systems or privies must be disposed of in a manner approved through a written plan submitted to the Administrative Agency for
- a. Transporting by a licensed wastewater hauler to a permitted wastewater treatment facility; or
  - b. Discharge or Injection on cropland/grassland (see Land Application)
- F. **Land Application- Permit Required.** A licensed Sanitary Disposal Service Operator must obtain a Land Application Permit from the [Administrative Authority] to legally land apply domestic septage to a parcel(s) of land. Among other requirements, the domestic septage must be chemically treated with lime for thirty (30) minutes or incorporated into the soil within six (6) hours of the application as per federal regulation, 40 CFR Part 503 (EPA 503 Program, Land Application of Septage). No discharge of such wastewater shall be permitted:
- i. 1. Within one-hundred (100) feet of any water well, or
  - ii. 2. Within \_\_\_\_\_ (\_\_\_) feet of other properties, or
  - iii. 3. Within thirty-three (33) feet of any surface water body, or
  - iv. 4. Onto saturated or frozen ground, without prior approval of the Administrative Agency; and
- G. **Applications for Permits and Licenses.** All persons required by this code to obtain a permit or license shall make application for such permit or license to the \_\_\_\_\_ County \_\_\_\_\_ Department on standard forms provided for that purpose.
- H. **Issuance of Permit or License.** After receipt of an application for a permit or license required by this code, the [Administrative Authority] shall begin such investigations as deemed necessary to determine whether the permit or license should be issued or denied, and shall issue or deny the permit or license within \_\_\_\_\_ (\_\_\_) business days depending upon information and data requested. If the permit or license is denied, the [Administrative Authority] shall send the applicant a written notice with reasons for denial stated thereon.

It shall be the duty of the person performing the work authorized by a permit to notify the [Administrative Authority] when work is ready for any required inspection. Such notification shall be given not less than \_\_\_\_ (\_\_\_) hours during normal office hours before the work is to be inspected.

- I. **Right of Access.** Application for, and acceptance of, any permit issued under this code shall grant to any representative of the [Administrative Authority] the right to enter upon any property subject to the permit, at any reasonable time during standard business hours, with or without notice, for the purpose of inspection to determine and ensure qualifications for and compliance with the permit, and shall allow for reasonable access to and review of records, property or other materials necessary to perform the inspection.
- J. **Authorized Activity.** Each permit or license issued under the authority of this code shall be limited to and expressly provide for the type and manner of activity permitted for the holder and shall not be used nor applied for any other purpose, type or manner of activity. The permit or license shall specifically refer to the activity description contained within the permit or license application, and any change in the type, manner, scope or location of any activity shall require application for and modification of the permit or license.
- K. **Permit/License Non-transferable.** No permit or license required by this code shall be transferable, nor shall any fees required and paid be refunded.
- L. **Term Expiration.** Each permit or license issued under the authority of this code shall clearly state the date of issuance, the term of the permit or license, and the expiration date. The term of each permit or license issued under this code shall be for a period not to exceed \_\_\_\_\_, unless otherwise specified.
- M. **Renewal.** Any permit or license issued under the authority of this code may be renewed for one or more additional terms upon application for renewal filed with [Administrative Authority]. No permit or license which has been expired for more than \_\_\_\_\_ days or which is subject to revocation, for any reason, may be renewed, and such permits or licenses may be reissued only upon filing of a complete application for a new permit or license.
- N. **Errors and Omissions.**
1. The issuance of a permit shall not prevent the [Administrative Authority], and/or designees from thereafter requiring the correction of errors in plans and specifications or from preventing construction activity being carried on thereunder when such activity would be in violation of this code or of any other code or resolution or from revoking any permit or license when issued in error.
  2. [Administrative Authority], and/or designees may, in writing, suspend or revoke a permit or license issued under provisions of this code whenever the permit is issued in error or on the basis of incorrect information provided by the applicant.
- O. **Standard Fees.** The \_\_\_\_\_ County Board of County Commissioners shall establish a schedule of fees for all permits and licenses required by this code, payable upon submission of the application for such permit or license.

**Section 2. Supplemental to State Regulations**

The permit(s) or license(s), and all fees, conditions and regulations imposed under this code shall be supplemental to and in addition to any permits, licenses, fees or regulations imposed or required by any other law, including those administered by the Kansas Department of Health and Environment.

**Section 3. Administration of State Requirements**

In the event that any rule, regulation or requirement arising under the laws of the State of Kansas is assumed or administered through the jurisdiction of the \_\_\_\_\_ County Board of County Commissioners, and/or the [Administrative Authority], and/or designees, acting under any lawful executive or administrative order or pursuant to a contract agreement, whereby the jurisdiction of any state authority is delegated to or administered by \_\_\_\_\_ County, then any permit or license issued or issuable by the state authority shall apply and shall satisfy the permit or license requirements imposed by this article subject to the following conditions and exceptions:

- A. **Permit or License Fees:** The permit or license fees required by this article, Section 1, shall apply and be required for payment if greater than or equal to any state-imposed fees. The state-imposed fees shall apply whenever it is greater, but only one fee shall be imposed and required for payment.
- B. **Conflict in Regulations or Requirements:** All rules, regulations, restrictions and requirements of this code shall remain in effect and shall apply to any activity or condition covered by this code except when in direct conflict with a provision of the state rules or regulations, in which case the state-imposed rules or regulations shall apply. Terms and conditions, rules, requirements, regulations or limitations which are supplemental to those imposed by the state and which are not specifically or expressly excluded or prohibited, shall not be considered conflicting and shall be imposed and in effect.
- C. **Additional Regulations:** Rules, regulations and requirements applicable to any conduct, activity, condition or standard which is not expressly regulated by the state, but which is regulated by this code, shall be and remain in full force and effect as specifically applied under this code for and within \_\_\_\_\_ County Kansas.

## ARTICLE IV

### INSPECTIONS AND INVESTIGATIONS

**Section 1. Inspections Required**

Physical site inspections shall be authorized and performed for all permitted or licensed activities under this code.

**Section 2. Inspection Reports**

A written inspection by the [Administrative Authority], and/or designees shall be made for all inspections conducted under the authority of this code, stating the name of the inspector, the date and time of the inspection, the type of inspection, and the property inspected. The report shall enumerate all findings made during the inspection. The report is a public document.

**Section 3. Inspection Scheduling**

Whenever inspections are required under this code to be scheduled for any installation, construction, initial activity or for correction of any violation or other non-conforming condition, it shall be the duty of the holder of the permit or license or the operator of the establishment to promptly notify the [Administrative Authority], and/or designees and schedule the time and date for the inspection.

**Section 4. Property Transfer Inspections**

Whenever any building or use requiring sanitation is connected to or is served by a private wastewater system, and/or private water supply, and is offered for sale, including contract for deed, transfer, leasing or renting, the seller shall have such system inspected by a licensed inspector approved by the [Administrative Authority], and/or designees.

The protocol for inspection of private wastewater systems shall include, but not be limited to:

- A. **Septic Tank with Absorption Field Systems:** Septic tanks must be pumped dry and inspected to determine volume, tank composition, baffles or tees at the inlet and outlet and the septic tank's general structural integrity, location, measurement and mapping of the absorption field lines (if records of the location are available).
- B. **Pump Tanks with Absorption Field Systems:** Pumping dry and inspection of the pump tank to determine volume, tank composition, baffles or tees at the inlet and outlet and the pump tank's general structural integrity, location, measurement and mapping of the absorption field lines (if records of the location are available). Pump operation and high-water alarms.
- C. **Aerated Tanks:** Aerator operation, manufacturer and maintenance contract. Pumping and inspection of the septic tank to determine volume, tank composition, baffles or tees at the inlet and outlet and the septic tank's general structural integrity. Location, measurement and mapping of the absorption field lines (if records of the location are available). Pump operation and high-water alarms.
- D. **Composting Toilets:** Operation and design standards of the specific system.
- E. **Drip Irrigation System:** Operation and design standards of the specific system.
- F. **Holding Tanks:** Structural integrity, alarm system, pumping records and verification of use.
- G. **Mound System:** Design Standards and operation of the individual system.

- H. **Wastewater Stabilization Pond (Lagoon):** Dimensions; type and integrity of fencing; vegetation (growth such as cattails, trees and duckweed); evidence of erosion; evidence of seepage; any structures over 10 ft. tall within 50 ft. of the operating level; color of the water; and cleanouts every 100 ft. or less.
- I. **Private Water Supply:** Identify type of water supply (drilled well, hand dug well, other). If private water supply is a well, determine whether it is properly sealed. If there is a public water supply and private supply on same property, determine if there are any cross connections.

## ARTICLE V.

### ENFORCEMENT PROCEEDINGS

#### Section 1. Emergency Orders

The [Administrative Authority], and/or designees, may issue such orders or directives as deemed necessary upon a determination that such action is required to prevent, contain or eliminate an obvious violation of this code or an imminent threat to the health or safety of the public.

- A. **Health Risk:** Whenever [Administrative Authority], and/or designees determines that a condition exists which requires immediate action to protect public health, may without prior notice or hearing, issue an emergency order stating the nature of the threat to public health and directing that action be taken deemed necessary to eliminate or minimize such condition. Notwithstanding any other provisions of this code, such order shall be effective immediately upon issuance and shall be put in writing as soon as practicable.
- B. **Work Stoppage:** Whenever any work is being performed on an onsite wastewater disposal system, or onsite water (private wells) supply system, contrary to the provisions of this code, the [Administrative Authority], and/or designees may order the work stopped immediately by issuing an emergency order and serving it on any persons engaged in the doing or causing such work to be done, and any such person shall forthwith stop work until authorized by the [Administrative Authority], and/or designees to proceed with the work.
- C. **Compliance:** Any person, to whom an emergency order is directed, shall comply therewith immediately, but upon written request filed within \_\_\_\_ ( ) days of issuance, shall be afforded a review of the order by [Administrative Authority], and/or designees. Such review shall be held within \_\_\_\_ ( ) days of the issuance of such emergency order.

#### Section 2. Suspension of Permit or License

The [Administrative Authority] may suspend any permit or license issued if the holder thereof does not comply with the requirements of this code. The suspension shall become effective

\_\_\_\_ ( ) days after the holder of the license or permit, or the person in charge of such establishment or premises subject to the permit or license, receives written notice of such suspension. The holder or other aggrieved party may request an appeal hearing in accordance with Article VI of this code. After a hearing, [Administrative Authority] may uphold the suspension as originally ordered or modify it, but in no event shall the [Administrative Authority] enter an order of suspension for a period longer than that set out in the original order. The original order, or any order entered after an appeal, may condition the length of time of the suspension upon correction of the conditions upon which the suspension is based.

**Section 3. Revocation of Permit or License**

The [Administrative Authority] may revoke a permit or license for violations of any of the requirements of this Code or for interference with the \_\_\_\_\_ County \_\_\_\_\_ Department in the performance of its duties.

Prior to revocation, the [Administrative Authority] shall notify, in writing, the holder of the permit or license, or the person in charge of the establishment or premises subject to the permit or license, of the specific reason(s) for which the permit or license is to be revoked and that the permit or license becomes final. Any holder of the license or permit, or the person in charge of the establishment or premises which is subject to the notice of violation, may request an appeal hearing as provided in Article VI of this Code. If no request for an appeal hearing is filed within \_\_\_\_ ( ) days of the notice of violation, the revocation of the permit or license becomes final.

Whenever a revocation of a permit has become final, the holder of the revoked permit may make a written application for a new permit and pay the fee required.

Whenever a revocation of a license has become final, the holder of the revoked license shall not be eligible for a new license unless or until the [Administrative Authority] is assured that such licensee is qualified to perform all duties in compliance with the requirements of this code.

**Section 4. Abatement of Nuisances**

In accordance with K.S.A. 65-159; the [Administrative Authority] may maintain a civil action in injunction, in the name of the Board of County Commissioners of \_\_\_\_\_ County, or any municipality in which this code is applicable, to abate and enjoin a nuisance, which have, or threaten to have a detrimental effect on the environment or the health of the public.

**ARTICLE VI  
APPEALS**

**Section 1. Appeal for Hearing**

Except as provided in Article V of this Chapter, any person aggrieved by a notice, final order or denial of a permit or license may request an appeal hearing on the matter before the



[Administrative Authority] provided such person files the request within \_\_\_\_\_ (\_\_\_) days after the date of the notice, final order or denial. Said request for a hearing shall be in writing setting forth the grounds in which the appeal request is made. The filing of the request for a hearing shall operate as a stay of any notice, final order or denial except an emergency order.

**Section 2. Hearing Officer**

The [Administrative Authority] shall designate, in writing, one or more officials to act as the department's Hearing Officer to hear appeals under this code. The officer may be an employee of the department but shall not be the person who, in the name of the department, made the determination or issued the order upon which the appeal is based.

**Section 3. Conduct of Hearing**

Upon receipt of the appeal request, the [Administrative Authority] shall assign a date and time for an appeal hearing, and designate a Hearing Officer. A copy of the appeal hearing date, time and place shall be mailed to each part of the appeal request and to the applicant, interested person, governmental agency or other appropriate party.

At the conclusion of the appeal hearing, the Hearing Officer shall issue a written decision to the petitioning party. The decision may sustain, modify or deny the decision of the [Administrative Authority].

A summary of all proceedings of the appeal hearing, including the findings and the decision of the Hearing Officer, together with a copy of the appeal request, every notice and order related thereto, shall be filed with the \_\_\_\_\_ County \_\_\_\_\_ Department.

**Section 4. Application of State Law Procedures**

The appeal of any final decision or action of the [Administrative Authority] which is taken under authority of a State Administrative Agency in application of the laws of the State of Kansas shall be subject to and conducted in accordance with the Kansas Administrative Procedures Act, K.S.A. 77-501, et seq. and the provisions of that Act shall supersede any, and all, time limitations and procedures otherwise specified in this code.

The Kansas Administrative Procedures Act shall not apply to any proceedings arising out of an appeal from any decision or action taken solely under the authority of the Board of County Commissioners.

## ARTICLE VII:

### VIOLATIONS AND PENALTIES

**Section 1. Prohibited Practices and Unlawful Conduct**

The following acts shall be unlawful:

- A. **Obstruction of Administrative Agency.** No person shall willfully impede or obstruct a representative of the \_\_\_\_\_ County \_\_\_\_\_ Department in the discharge of his or her official duties under the provisions of this code.
- B. **Operation without a Permit or License.** No person shall do any act or engage in any activity for which a permit or license is required by this code unless first obtaining such permit or license.
- C. **Failure to Comply with Emergency Order.** No person shall fail or refuse to comply with an emergency order of the Administering Agency issued under Article V of this Chapter.
- D. **Failure to comply with Permit or License.** No person shall fail to comply with the specified terms or conditions of any permit or license issued under this code nor do any act or engage in any activity or conduct regulated by this code without a valid permit or license, nor continue activities or conduct subject to any permit or license which has expired, been suspended or been revoked under this code.
- E. **Failure to Comply with Regulations.** No person shall do any act or engage in any activity which is regulated by any Article, Section or Chapter of this code except as authorized and permitted under the code, and no person shall knowingly operate any activity regulated by this code in any manner which does not comply with the requirements of the conditions and regulations specified in this code.
- F. **Falsification and Misrepresentation.** No person shall falsify nor misrepresent any fact, information, product or data provided, required or submitted for any application, permit, license, inspection, examination, investigation, report, record, test or other determination required under this code.
- G. **Improper Discharges.** No person shall cause nor permit any wastewater to be discharged to or upon the ground surface, into the groundwater or natural surface water course which creates or causes a health hazard or unlawful pollution, and no person shall cause nor permit any effluent from any onsite wastewater disposal system to be so discharged, or to leak, seep or otherwise escape from the system such as to create or cause a health hazard or unlawful pollution.
- H. **Failure to Repair or Correct.** No person shall fail or refuse to repair or correct any defect, deficiency or other condition, whether natural or otherwise, in any onsite wastewater disposal system, or onsite water (private wells) system, which has caused, or which the [Administrative Authority], and/or designees has determined is likely to cause, within reasonable certainty, any improper discharge or other health hazard, unsanitary condition, or unlawful pollution. If the violation is not corrected within the time frame set forth by the [Administrative Authority], the Director may issue an order for the property to be vacated until corrections have been made and any fines have been paid.

**Section 2. Penalties**

Any violation of any provision or requirement of this code or the commission of any unlawful act or conduct specified in this Article shall be deemed to be a Class "C" misdemeanor pursuant to K.S.A. 19-3707 and punishable upon conviction by a fine not to exceed two-hundred dollars (\$200) for each offense. Each day's violation shall be a separate violation.

**Section 3. Prosecution**

The County Attorney/Counsel, as provided by K.S.A. 19-3707, shall prosecute violations of this code and is hereby authorized and directed to file appropriate actions for such prosecution upon request of the Administrative Authority. Actions of injunction, mandamus, and *quo warranto* may be utilized for enforcement of these codes and shall be governed by the provisions of the Kansas Code of Civil Procedure. The County Attorney shall act within \_\_\_\_\_ ( ) days of receipt of documentation of this violation.

## ARTICLE VIII: CODE VARIANCE

**Section 1. Variances**

The owner or representative of any land, or the user of any onsite wastewater treatment system or private water supply regulated by this code may file a request for a Variance to the Administrative Authority for any standard, specification, rule or regulation prescribed by this code which is not otherwise discretionary under the authority of the Administrative Authority. After receipt of the request, the Administrative Authority, and/or designees shall prepare a report and recommendation regarding the request for a Variance. A copy of the report shall be sent to the requesting party and to any appropriate Planning or Governing body or interested person or party requesting such report. The report shall include specific reasons or purpose for a recommendation of approval or denial.

In making any decision varying or granting an exception of the rules or modifying any provision of this code, the Administrative Authority, and/or designees may impose such restriction terms, time limits and other appropriate safeguards as deemed necessary to protect the public interest and assure compliance with the purpose and intent of this code, including performance bonds, or other surety acceptable to the County, guaranteeing the completion of any required improvement. Such surety shall be in favor of the County and properly executed prior to the granting of any permit. The amount of the surety shall be based on a general estimate of the cost of said improvement as determined by the Board of County Commissioners.

# ARTICLE IX:

## DEFINITIONS

### Section 1. Definitions

The following words, terms and phrases appear in more than one Chapter of this Code and, thus, have general application and usage. Words, terms, and phrases appropriate or applicable to specific Chapters within this Code are defined, where necessary, within those Chapters. Unless the context requires or specifies otherwise, the following words, terms or phrases, as used in this Code, shall be given the meaning defined in this section.

- A. Absorption System: An onsite wastewater disposal system for the treatment of wastewater by means of a leaching field and adjacent soil or by other means of absorption into the ground.
- B. Absorption Bed: Below-grade soil treatment area consisting of a wide and shallow excavation containing distribution media and multiple laterals.
- C. Absorption Field (Lateral Field): A configuration of onsite wastewater absorption trenches or bed installed to absorb wastewater effluent from a septic tank or other solids-removal device.
- D. Absorption Trench (Lateral Trench): Below-grade soil treatment area, having fixed horizontal separation, consisting of a shallow excavation with a width of 3 feet or less, containing distribution media and one lateral.
- E. Access: Entry into or upon any real estate, structure or vehicle including any part thereof.
- F. Administrative Agency: The agency or official designated in any of the Chapters contained in this code to administer the provisions of that Chapter or any Section therein.
- G. Administrative Authority: The Board of County Commissioners of their appointed representative.
- H. Administrative Rules: Any regulation adopted by an administering agency, which the agency determines to be necessary and appropriate to enable it to fulfill its duties and responsibilities under this Code.
- I. Advanced/Enhanced Onsite Wastewater Treatment System: A private wastewater disposal system, approved by the [Administrative Authority], and/or designees, which effectively provides secondary treatment of septic tank effluent to reduce levels of pollutants before discharge to an approved underground soil distribution system.
- J. Aerated/Aerobic Wastewater Treatment System: An onsite wastewater disposal system employing biological action, which is enhanced by the addition of air or oxygen, and has been tested and meets NSF Standard 40.
- K. Agricultural Purpose: A land use related to the production of livestock or crops, including growing crops or pasture and functions immediately and necessarily related thereto, and the feeding of livestock by the resident on the land, but does not include any structure used as a dwelling or the sewage treatment system servicing such dwelling.
- L. Alternative Onsite Wastewater System: Any onsite wastewater system which has been approved by the [Administrative Authority], and has proven reliability and performance in field use, but which differs in design or operation from septic tank and absorption-field system and/or wastewater stabilization pond (lagoon).
- M. Applicant: Any person who submits an application or requests permission to do some act regulated by this Code.

- N. Application: The application form provided by an Administering Agency, including the filing fee and any other supporting documents required by the agency.
- O. Aquifer: A subsurface water-bearing bed or stratum of sand, gravel or bedrock which stores or transmits water in recoverable quantities or is capable of yielding water to, or transmitting water contaminants or pollutants to, wells or springs.
- P. Authorized Representative: A person who is designated by the [Administrative Authority] to administer the provisions of this Code or any Section therein.
- Q. Bedrock: Consolidated rock that underlies the soil and other unconsolidated material.
- R. Blackwater: Wastewater generated from toilets and kitchen sinks. Blackwater has the potential to be pathogenic.
- S. Board of County Commissioners: The Board of County Commissioners of \_\_\_\_\_ County, Kansas.
- T. Board of Health: The Board of County Commissioners acting as the Board of Health for \_\_\_\_\_ County, Kansas.
- U. Cesspool: A drywell that receives untreated wastewater and which may have an open bottom and /or perforated sides. Prohibited by this Code.
- V. Class V Well: Those wells defined in the Federal Underground Injection Control (UIC) program as Class V [40 C.F.R. 146.5]. A septic system receiving only domestic wastewater and having the potential to serve 20 or more persons a day or any septic system receiving non-domestic wastewater is a Class V Well. Class V UIC wells prohibited by Kansas law include large capacity cesspools, motor vehicle disposal wells and industrial waste disposal. (K.A.R. 28-46)
- W. Commercial Wastewater: Any wastewater produced as a by-product of any commercial process or operation, other than domestic sewage.
- X. Composting Toilet: A self-contained toilet system using little or no water, designed to decompose human wastes through microbial action (composting), and store the resulting material for further treatment and disposal.
- Y. County: \_\_\_\_\_ County, Kansas.
- Z. Distribution Box: A watertight chamber below the outlet level of a septic tank or treatment unit from which wastewater enters the absorption system.
- AA. Domestic Wastewater/Sewage: Wastewater/Sewage which is normally characterized as residential wastewater/sewage, not from commercial or industrial activity, and which originates primarily from kitchen, bathroom and laundry sources, including waste from food preparation, dishwashing, garbage grinding, toilets, baths, showers and sinks.
- BB. Effluent: Sewage water, or other liquid, partially or completely treated or in its natural state, discharging from a septic tank, subsurface wastewater infiltration system, aerobic treatment unit, or other treatment system or system component.
- CC. Engineer: A licensed professional civil engineer registered with the State of Kansas.
- DD. Engineered: Plans, drawings, designs and calculations prepared and stamped by a professional engineer licensed by the State of Kansas.
- EE. Environmental Health Handbook (EHH): A technical resource for professionals, service providers and technicians who work with private wastewater and private water systems. First published in 1992 by the Kansas Department of Health and Environment, and revised in 2002 and 2020.
- FF. Establishment: Any structure or self-contained unit therein, including single- and multiple-family dwellings, commercial and industrial buildings, schools, churches, and public institutions.

- GG. Experimental/Innovative System: A type of onsite wastewater treatment and disposal system that by construction, design, or function does not conform to requirements set forth in this Code and/or Bulletin 4-2 design. This category is designed to allow innovative systems that have been demonstrated to work in practice or theory to be considered for use in the County. Each Experimental/Innovative System must undergo a thorough [Administrative Authority] review prior to system installation and be granted a variance under the provisions of this Code.
- HH. 100-Year Floodplain - (as defined by FEMA Special Flood Hazard Zone-AE): Land which is subject to inundation as a result of flooding having a one percent (1%) chance of occurrence every one-hundred (100) years; and more recently referred to as a Special Flood Hazard Zone- AE, as defined by the Federal Emergency Management Agency (FEMA).
- II. Graywater: Wastewater from sources within single-family residences, including showers, bathtubs, clothes-washing machines, hand-washing lavatories and sinks (excluding water from soiled diapers, kitchen sinks and dishwashers) that are not used for disposal of hazardous or toxic ingredients.
- JJ. Grease Traps: A plumbing device designed to intercept or trap most greases and solids before they enter a wastewater disposal system. These reduce the amount of fats, oils and greases (FOGs) that enter the septic tank and absorption field.
- KK. Hearing Officer: Any person designated in this Code, or by an administering agency, to hear appeals from decisions made by an agency representative relating to the enforcement and administration of this Code.
- LL. Holding Tank: An approved watertight receptacle for the retention of wastewater before, during or after treatment.
- MM. Industrial and Commercial Wastewater Systems: Any wastewater system for wastewater produced as a by-product of any industrial and commercial process or operation, other than domestic wastewater. Uses involving industrial or commercial wastewater must comply with regulations involving industrial and commercial wastes as approved and permitted by the Kansas Department of Health and Environment. Industrial or commercial wastewater (from shops, car washes, funeral homes, etc.) shall not be permitted to discharge to any onsite domestic wastewater system.
- NN. Industrial Wastewater: Any wastewater produced as a by-product of any industrial process or operation, other than domestic sewage.
- OO. Installer: See Onsite Wastewater System Installer.
- PP. Lagoon: A constructed basin surrounded with berms and lined with either low-permeability soils or a synthetic liner, which uses wind or mechanical aeration, sunlight, and natural bacteria to treat domestic wastewater through physical, chemical, and biological processes.
- QQ. Lateral: Pipe, tubing or other conveyance, used to carry and distribute effluent.
- RR. Lateral Field: See Absorption Field.
- SS. Lateral Trench: See Absorption Trench.
- TT. Law: Includes Federal, State and Local statutes, ordinances, regulations and resolutions.
- UU. Major Repair: See Structurally Significant Alteration.
- VV. Minor Repair: Means the replacement or repair of onsite wastewater system subcomponents, such as pipes, switches, pumps, valves, baffles, or such similar type of work as designated by the [Administrative Authority], and/or his/her designees.
- WW. Mound System: An above-ground timed pressure dosed onsite wastewater system used to absorb wastewater from septic tanks in cases where seasonably high water table zones, high bedrock considerations, slowly permeable soils, or limited land areas prevent conventional subsurface absorption systems.

- XX. Onsite: A water supply and/or a sanitation system located entirely within the boundaries of the legal description of the property which they serve.
- YY. Onsite Wastewater System Installer: Any person duly licensed to construct, install and/or repair any onsite wastewater disposal systems authorized by this Code.
- ZZ. Onsite Wastewater System, or Onsite System: A Private Onsite Wastewater Treatment and Disposal System.
- AAA. Permit: The written permission to perform some act regulated by this Code, including, for example, permission to construct or permission to operate.
- BBB. Person: An individual, corporation, partnership, association, state or political subdivision thereof, federal agency, state agency, municipality, commission or interstate body or other legal entity.
- CCC. Plat: A map or plan of an area of land showing actual or proposed features.
- DDD. Pollution: Any induced alteration of the physical, chemical, biological, and radiological integrity of water, air, soil (both surface and subsurface) or contamination of food or foodstuffs.
- EEE. Premises: Any lot or tract of land and all buildings, structures or facilities located thereon.
- FFF. Privy (Sanitary Privy): A facility with a water-tight receptacle made of concrete or other acceptable material designed to receive, store and provide for periodic removal of non-water carried wastes from the human body. Material removed from the vault is transported and disposed at a licensed public waste treatment facility or by other means as approved by the [Administrative Authority], and/or his/her designees.
- GGG. Public Wastewater Disposal System: A sanitary wastewater system which holds a state water pollution control permit and collects untreated or partially treated wastewater from individual establishments, premises, or recreational areas and transports it by means of pipes or conduits to a plant or other location for treatment.
- HHH. Pump Tank: Tank used in addition to a septic tank, which contains a sewage effluent pump, control floats, control panels, and a high-water alarm.
- III. Pumper/Hauler: See Sanitary Disposal Service Operator.
- JJJ. Rathole: A well completed above the water table so that its bottom and sides are typically dry except when receiving fluids. Prohibited by this code.
- KKK. Sanitarian: An agent determined by the County to be trained in the sanitary sciences (i.e. biology, chemistry, geology, physics and mathematics) who acts as an inspector or health official.
- LLL. Sanitary Disposal Service: The pumping out and/or removal of wastewater [sewage, sludge or human excreta] from onsite wastewater disposal systems [any source, including but not limited to sanitary privies, vaults, septic tanks, lagoons, waterless sewage systems, private wastewater treatment systems, or holding tanks] and/or the transportation of such material to a point of temporary storage or final treatment or disposal.
- MMM. Sanitary Disposal Service Operator: Any person duly licensed to perform sanitary disposal services.
- NNN. Sanitary Sewage/Wastewater System: Any system of pipes, tanks, conduits, structures or other devices for the collection, transportation, storage, treatment and disposal of sewage.
- OOO. Seepage Pit: A subsurface excavation three (3) feet or deeper, which may be filled or lined with rock or gravel and receives untreated wastewater. Prohibited by this Code.
- PPP. Septage: Either liquid or solid material removed from a septic tank, portable toilet, type III marine sanitation device, or similar system that receives only household, non-commercial, non-industrial sewage. Domestic septage does NOT include grease from grease traps.

- QQQ. Septic Tank: A watertight, accessible, covered receptacle that is designed and constructed to receive wastewater either before, during or after treatment. All septic tanks shall be designed, constructed and approved according to specifications set forth by the Kansas Department of Health and Environment Bulletin 4-2.
- RRR. Sewer District: Any County-operated municipal sewer system duly formed, authorized and empowered to plan, construct and operate a public sewer system in accordance with K.S.A. 19-27a01.
- SSS. Sludge: Refers to the layer of solids that accumulates at the bottom of a septic tank or other wastewater system component, as a result of the wastewater treatment or detention processes. Often consists of decomposed or partially decomposed solids, active or inactive microbial bulk, and any other materials that are heavier than the liquid wastewater.
- TTT. Structurally Significant Alteration: When used in reference to private onsite wastewater treatment and disposal systems, the term "structurally significant alteration" means any of the following— a) Replacement, repair or extension of any portion of the lateral field of the system, and/or b) Replacement, repair or reconstruction of any one or more of the critical parts of the system, as designated by the Administrative Agency; and/or c) Any replacement, repair or reconstruction which, upon review of the Administrative Agency, is determined to be an essential repair in order to correct or prevent an improper discharge or imminent health hazard or unlawful pollution.
- UUU. Subdivision: Any land, vacant or improved, which is divided or proposed to be divided into two (2) or more lots, parcels, sites, units, plots, or interests for the purpose of sale, lease or financing of development, either on the installment plan or upon any and all plans, terms and conditions, including re-subdivision. "Subdivision" includes the division or development of residential and nonresidential-zoned land, whether by deed, meets and bounds description, map, plat or other recorded instrument.
- VVV. System Failure: A condition of an onsite wastewater system that threatens the public health by inadequately treating sewage or creating a potential for direct or indirect contact between sewage and the public, as determined by the [Administrative Authority]. System failure includes, but is not limited to: surface discharge of sewage; seeping of incompletely treated sewage; unfenced or fenced lagoons that do not restrict access by children, pets and/or livestock; any other condition determined by the [Administrative Agency] to be a health hazard to humans, pets or livestock.
- WWW. Trunk Line: The solid pipe from which the laterals extend in a septic tank system.
- XXX. Variance/Waiver/Exception: A rule, exception or exemption granted by the [Administrative Authority], and/or his/her designees from the specific terms of this Code which will not be contrary to the public interest and where owing to special conditions a literal enforcement of this Code will, in an individual case, result in an unnecessary hardship.
- YYY. Wastewater Stabilization Pond: See Lagoon.
- ZZZ. Waterless Toilet: A self-contained toilet system using little to no water, designed to store human waste for further treatment and disposal.

## **CHAPTER II. WASTEWATER DISPOSAL**

### **ARTICLE I.**



# GENERAL PROVISIONS

## Section 1. Purpose

Wastewater is a potential source of disease and a potential hazard to the health, safety and welfare of the public. It also poses a direct threat to the environment as a potential pollutant of the air, water and soil, and presents a hazard to all forms of plant and animal life. It is the purpose of this chapter to provide minimum standards for the sanitary disposal of all wastewater generated or transported within \_\_\_\_\_ County unless otherwise regulated by a competent authority.

## Section 2. Scope

All wastewater must be disposed of by the use of an approved wastewater system as defined in this Article. A sanitary wastewater system may be classified as either a public wastewater disposal system or a private onsite wastewater treatment system (POWTS), unless alternative disposal/treatment options have been approved by the [Administrative Authority].

## Section 3. Requirements for Subdivision Development

After the adoption of this code, no person shall develop any subdivision until the plans and specifications for the wastewater system(s) have been approved by the [Administrative Authority], and/or designees and, when required, by the Kansas Department of Health and Environment. A subdivision is defined as any plat creating two (2) or more lots pursuant to the provisions and requirements set forth in the \_\_\_\_\_ County Subdivision Regulations.

No township or county planning commission, or zoning board authorized to review plats of subdivisions, shall recommend for approval any plat containing one or more lots or building sites having less than \_\_\_\_\_ square feet of land available for an onsite wastewater system, unless a public wastewater system is provided to serve all properties within the subdivision; or a surety bond, in an amount stipulated by the \_\_\_\_\_ County Board of County Commissioners, is filed with the \_\_\_\_\_ County Treasurer to guarantee the installation of such public systems.

## Section 4. Rules of Application

The provisions of Bulletin 4-2 "Minimum Standards for Design and Construction of Onsite Wastewater Systems" published by KDHE and Kansas State University Agricultural Experiment Station and Cooperative Extension Service, March 1997, and as may be amended, is hereby adopted and incorporated into this Code and is set forth herein to assure protection of the public health and environment from all designed, constructed and installed onsite wastewater systems. Requirements established by the KDHE, Bulletin 4-2 and the \_\_\_\_\_ County Sanitary Code shall apply and be applicable to any and all privately owned onsite wastewater treatment systems now or hereafter installed, used or operated for any facility located within the unincorporated area of \_\_\_\_\_ County Kansas.

Sections of the \_\_\_\_\_ County Environmental Sanitary Code may be more stringent than the requirements of KDHE Bulletin 4-2 and have been adopted based on available research and technology.

- A. **General Rule:** Unless otherwise provided or excepted in accordance with this Section, as of the effective date of the code, no person shall design, install, replace, alter, repair, use or operate, nor cause or allow the installation, replacement, alteration, repair, use or operation of any onsite wastewater disposal system except as permitted under and as which complies with the established requirements of this code.
- B. **Existing Systems Treating Domestic Wastewater:** Any onsite domestic wastewater disposal system lawfully installed prior to the effective date of this code, and used exclusively for domestic sewage, may remain in use if, and as long as:
1. It continues to operate in accordance with the original design and location and does not experience any system failure; and
  2. Does not present any hazard to the public health, safety or welfare; and
  3. Does not discharge onto the surface of the ground, or waters of the state, as defined in K.S.A. 65-161(a); and
  4. Any replacement, structurally significant alteration, enlargement, repair, removal, conversion, improvement or demolition shall comply with the requirements of this code or any later amendments, revisions or versions.
  5. The system is found to be adequate and not failing or in need of repairs at the time of property transfer.

Temporary hardship manufactured homes, set up subsequent to natural disaster or accidental destruction of a permanent dwelling or family hardship situations, as permitted by \_\_\_\_\_ County Regulations, may be connected to existing onsite sanitation systems. Such connections shall be subject to an inspection and compliance with the requirements of this code.

- C. **Existing Systems Treating Industrial and Commercial Wastewater:**
1. Discharge of industrial or commercial waste to a soil absorption system is prohibited. Any soil absorption system in commercial or industrial use at the time of passage of this code shall be referred to the Kansas Department of Health and Environment to assure compliance with state and federal requirements.
  2. Those systems, which are used exclusively for domestic wastewater, may remain in use, as long as the system is used only for domestic wastewater treatment and satisfies the requirements of this code.
- D. **Existing Tracts and Lots of Record:** The owner or representative of any land, which is a tract or lot of record on or before the effective date of this code, may apply for and receive a permit under the applicable provisions of this chapter if:
1. The tract or lot size is at least \_\_\_\_ (\_\_) acre(s); and
  2. The installation and use of the system shall be exclusively for onsite wastewater disposal and will comply with all other requirements of this code; and
  3. The lot is located in a parcel of land which has received final approval on or before the effective date of this code or the lot or tract is not platted but was

duly recorded as a lot or tract of record prior to the effective date of this code;  
and

4. The lot or tract is not located within the boundaries of any sewer district operated by \_\_\_\_\_ County.

## ARTICLE II.

### PUBLIC WASTEWATER DISPOSAL SYSTEMS

#### Section 1. Regulation of Municipal or Public Systems

Any public wastewater system which is maintained and operated by a municipality, by a lawfully created public sanitary sewer district, or by a lawfully organized public improvement district authorized under application of the Laws of the State of Kansas and located in whole or part within \_\_\_\_\_ County, Kansas, shall be built and operated only as permitted by the rules and regulations of the Kansas Department of Health and Environment.

#### Section 2. Policy Regarding Public Wastewater Systems

Due to unsuitable soil conditions, high ground water table, bedrock being close to the surface of the ground, the density of development permitted by \_\_\_\_\_ County Zoning and Subdivision Regulations, and the relationship of development to community growth areas, the \_\_\_\_\_ County Board of County Commissioners may require public wastewater districts to be established in accordance with K.S.A. 19-27a01. The cost of installation, maintenance and operation of the public wastewater district facilities shall be borne by those properties and persons being served by the system.

## ARTICLE III.

### PRIVATE ONSITE WASTEWATER TREATMENT AND DISPOSAL SYSTEMS

#### Section 1. Types

Private Onsite Wastewater Treatment Systems are classified as being one the following types:

1. Septic Tank & Soil Absorption System
2. Wastewater Stabilization Pond (Lagoon)
3. Other:
  - a. Mound System
  - b. Holding Tank
  - c. Composting Toilet
  - d. Alternative Treatment System
  - e. Subsurface Drip Disposal System with aerobic treatment

- f. Other system as defined by the County and in compliance with the sanitary code

**Section 2. Proper Maintenance and Operation**

All onsite wastewater disposal systems shall be maintained in good working condition and shall not discharge onto the surface grade or into the groundwater or drain into any stream or roadside ditch or produce any offensive odors or become a breeding place for flies, mosquitoes or rats and other disease vectors. Surfacing of effluent in pools or streams or groundwater contamination will indicate system failure. Whenever the [Administrative Authority], and/or designees shall find any onsite wastewater disposal system malfunctioning and causing any prohibited condition, it shall order the owner and/or user to correct the condition within \_\_\_\_\_ days.

Some alternative wastewater systems may require additional maintenance in order to function properly. The [Administrative Authority], and/or designees may require a maintenance agreement with a qualified service provider for the life of the system. All records of maintenance performed under a required maintenance agreement shall be provided to the [Administrative Authority], and/or designees within \_\_\_\_\_ days of completion.

**Section 3. Location of an Onsite Wastewater System**

All Onsite Wastewater Systems must meet the minimum separation distances outlined in the **Table 1** below, unless a variance or rule exception is granted pursuant to Chapter I, Article VIII, Section 1 of this code.

**Table 1: Minimum Separation Distances for Onsite Wastewater Systems:**

<b>Onsite Wastewater System</b>	<b>Minimum distance (feet)</b>
Septic tank to building foundation	10
Soil absorption field to building foundation	20
Any part of a wastewater system to:	
Public potable water line	25
Private potable water line	10
Property line	10
Public water supply, well or suction line	100
Private water supply well or suction line	50
Surface water course	50
Public Utility Lines (not water)	—
Wastewater Stabilization Pond (Lagoon):	
Property Line	50
Dwelling foundation	50
Private or public water line	—

**Section 4. Location of Onsite Wastewater Systems Below Flood/Full Pool**

- A. No portion of an onsite wastewater system shall be located below the flood pool elevation of any reservoir or full pool elevation of any pond, lake or water supply reservoir with the potential to inundate the wastewater system.
- B. No pond or swimming pool shall be constructed or maintained so as to discharge or have the potential to discharge water or graywater into an onsite wastewater disposal system which could result in the failure of that system, unless a structure or suitable arrangement approved by the [Administrative Authority], and/or designees, is constructed to protect the on-site wastewater disposal system from such discharge or potential discharge of water.

**Section 5. Location of Onsite Wastewater Disposal Systems Within a 100-Year Floodplain**

Except for wastewater stabilization ponds (lagoons), no portion of an onsite wastewater system shall be constructed within the Special Flood Hazard Zone AE as defined by the Federal Emergency Management Agency (aka: 100-year floodplain) for \_\_\_\_\_ County. This does not preclude repairs of existing systems, provided other requirements of this code are met. Berms of a wastewater stabilization pond (lagoon) shall be constructed a minimum of one (1) foot above the base flood elevation. Where base flood elevations have not been established, the base flood for the levee shall be determined and certified by a registered professional engineer or licensed surveyor.

**Section 6. Connections to Public Wastewater Disposal Systems**

To the extent feasible, public sewer systems shall be used for the disposal of all wastewater within \_\_\_\_\_ County. No onsite wastewater system shall be permitted under this chapter whenever a public sewer system is within four hundred feet (400') of the property line unless the [Administrative Authority], and/or designees finds that connection to such a sewer is not feasible or is cost-prohibitive and an onsite wastewater system meeting the requirements of this code can be constructed on the property.

**Section 7. Repairs and Corrections**

Any onsite wastewater disposal system that cannot connect to a public wastewater system and does not function properly as designed and permitted shall be replaced or repaired. Plans and specifications for the replacement or repairs shall be submitted to and reviewed by the [Administrative Authority], and/or designees, and no repairs or replacements, other than ordinary maintenance, shall be performed without a permit and inspection as required under this code.

**Section 8. General System Requirements**

The system shall be designed based on wastewater flow, including water used to flush a reverse osmosis or softener system. It should consist of a building connection, a treatment unit such as a septic tank and absorption field. An "absorption field" means a configuration of onsite trenches installed to absorb wastewater effluent from a septic tank or other solids removal device. The system shall be sized to receive all domestic wastewater including laundry waste,

whether or not an approved graywater system has been installed. The design of the system shall ensure that the waste discharged to the onsite wastewater disposal system:

- A. Does not contaminate any drinking water.
- B. Is not accessible to insects, rodents or other possible carriers of disease, which may come in contact with food or drinking water.
- C. Does not contaminate surface water or groundwater aquifers.
- D. Does not surface above ground level.
- E. Does not pose a danger and/or is not accessible to children or animals.
- F. Does not give rise to a nuisance due to odor or unsightly appearance.

#### **Section 9. Alternative Sewage Treatment Systems (ASTS)**

When site conditions are not conducive to the use of traditional septic systems, an Alternative Sewage Treatment System (ASTS) may be considered by the [Administrative Authority]. ASTS engineered designs must be submitted to the [Administrative Authority] for review and approval during the planning stages of the project. Some alternative systems are well-suited to individual homes, although the cost, complexity, and maintenance of these systems need to be carefully considered. Most use electric pumps or siphons as well as filters, all of which need more monitoring and maintenance than a traditional system.

Alternative sewage treatment systems are defined as any sewage treatment and dispersal system other than a conventional sewage disposal system. ASTSs are used to overcome one or more adverse site or soil condition such as high groundwater, slowly permeable soils, or other limiting condition or where increased wastewater treatment is needed. Unlike conventional sewage disposal systems, ASTSs vary in design and concept depending on the site and soil conditions. The design goals of all sewage treatment and dispersal systems, including ASTSs, are the prevention of disease, treatment and dispersal of sewage effluent below the surface of the ground, and the prevention of contamination of groundwater and other beneficial waters by discharges from sewage disposal systems. Deed Restrictions may be required depending on the maintenance protocol for each system.

#### **Section 10. Application Procedure**

The person applying for the wastewater disposal system permit shall first file an application in writing on a form furnished for that purpose by the [Administrative Authority], and/or designees. The permit application shall:

- A. Identify and describe the activity for which permission is requested (e.g. construction, repair, etc.). Identify the location of the activity for which permission is requested by legal description and street address.
- B. Indicate the type of establishment which the sanitary wastewater system will serve.

- C. Provide a completed soil profile analysis and site assessment for each site location as specified in Section 11 of this Article.
- D. Include a system design that is in agreement with the recommendations of the site assessment. System design should include a legal description of the site, required laterals, septic tank size or lagoon size, number of bathrooms in the dwelling and be prepared by a licensed installer or registered professional engineer.

**Section 11. Field Data Requirements**

- A. **Site and Soil Evaluation.** Four feet (4') of soil beneath the bottom of the soil absorption field is required to assure adequate treatment before wastewater reaches the water table or flows laterally due to the presence of a restrictive layer. An evaluation of the soil including a soil profile are required to assess the ability of a site to provide proper wastewater treatment. In some cases a variance may be allowed when an alternative design is proposed.
- B. **Soil Profile.** A soil profile shall be required by the [Administrative Authority], and/or designees and shall consist of an onsite visual examination of the soil in location of the proposed absorption field. The applicant shall be responsible for digging a minimum of two (2) three-foot by five-foot by five-foot (3'W x 5'L x 5'D) inspection pits prior to completing the analysis of the soil capabilities evaluation. This evaluation will be used to determine the soil loading rate.
- C. **Water Table Borings.** Borings to determine underground water elevation in low areas may be required by the [Administrative Authority], and/or designees. Borings shall be made to a minimum of seven feet (7'). Water table elevations shall not be recorded until sufficient time has elapsed for the stabilization of groundwater (such stabilization in clay soils may require several hours or overnight). Evidence of the presence of water above four feet (4') in the borings shall negate the use of a below-grade absorption field in that area. Location, identification number and depth to water table shall be recorded on the site plan. Other records of the water table elevation, including seasonal peaks, may be submitted or required.
- D. **Rock Borings.** Where surface outcroppings of subsurface rock exist, or are suspected, a sufficient number of borings to a depth greater than four feet (4') may be required by the [Administrative Authority], and/or designees to determine if such condition may interfere with installation, performance or repair of the proposed wastewater treatment system. Evidence of rock in the borings may negate the use of a conventional wastewater treatment system in that area. Boring locations and data shall be recorded by number on the site plan.

**Section 12. Plans and Specifications**

Plans and specifications shall be drawn to scale, no greater than one inch to fifty feet (1" – 50'), and shall include, but not be limited to the following information:

- A. Location of the soil profile samples in relation to the area of the proposed onsite wastewater disposal system.

- B. Size of lot, dimensions and relative location of structures.
- C. Proposed location of the onsite wastewater disposal system, including all system parts.
- D. Retention of Plans: One set of approved plans shall be retained by the Administering Agency and one set of approved plans shall be returned to the applicant.

**Section 13. Inspection Required for System Approval**

No onsite wastewater disposal system shall be placed into service and no occupancy permit may be issued to any person for use of any establishment to be connected to such system until the system has been inspected and approved by the [Administrative Authority].

- A. No inspection nor system approval will be initiated until and unless the applicant or owner has fully complied with the permit and application requirements of this Code. Any required permit must be posted and displayed at the property job site.
- B. The applicant, property owner or installer shall provide a minimum of one (1) working day notice to the Administrative Agency to perform any required inspection. An inspection will be conducted only when proper notice is given and only where the site address can be properly located on a map or is posted and visible from the road.
- C. There will be at least one (1) inspection required for each wastewater system. A second inspection may be required when determined necessary by the inspector.

**Section 14. Applicable Building Codes**

In addition to the standards and requirements established under this Chapter, the installation, alteration, construction, reconstruction, repair, replacement or other work for or upon any onsite wastewater system regulated under this Code shall comply with and satisfy the specifications and requirements, whenever applicable, of the International Building Code and the International Plumbing Code, or similar codifications, as adopted by and in effect in \_\_\_\_\_ County, Kansas. The Administering Agency shall have available copies of any such code specifications and shall delineate those parts and requirements, which are applicable to private wastewater systems.

**Section 15. Abandoned System Requirements**

An abandoned wastewater system shall be disconnected from building or facilities, pipes plugged, and receptacles dismantled or removed; and any void space in which such receptacles are contained shall be plugged following procedures described in K-State Research and Extension bulletin MF-2246, Plugging Cisterns, Cesspools, Septic Tanks and Other Holes. Before filling, receptacle contents shall be pumped out and disposed of in accordance with Chapter II, Article XI, Section 3 of this Code (Regulations for Sanitary Disposal Service Operators). The guidance applies to systems that receive only domestic sewage. If the system has received non-domestic sewage, then closure must be coordinated with KDHE, which may require additional sampling and closure activities.



ARTICLE IV.  
REQUIREMENTS FOR ONSITE WASTEWATER  
ABSORPTION SYSTEMS

**Section 1. Permits Required**

It shall be unlawful for any person, firm, or corporation to erect, construct or perform any structurally significant alteration, remove, convert or demolish any wastewater system regulated by this Code, without first obtaining a wastewater system permit from the [Administrating Authority/Administrative Agency]. Permits issued under this Article shall be subject to the following qualifications:

- A. Minimum Lot Size. A minimum lot or tract size of \_\_\_\_\_ (\_\_) acres shall be required for any permit issued under this Article except as provided in Chapter II, Article I, Section 4.D.
- B. Terms and Renewals. A permit issued under this Article shall be valid for a period of \_\_\_\_\_ (\_\_) months following the date of issuance and may be renewed annually by order of the Administrative Agency.
- C. Transfer. A permit issued under this Article shall not be transferable.
- D. Standards. No permit shall be issued to any person, property or establishment which does not comply with and satisfy the specified requirements of all applicable Sections of this Code.

**Section 2. General System Requirements**

The system shall be designed to consist of a building connection and treatment unit, such as a septic tank and absorption field.

**Section 3. Application Requirements**

The system design shall include the required laterals, and septic tank size as set forth in Section 4 of this Article.

**Section 4. Construction Specifications**

Septic tanks shall meet the design and construction specifications as set forth in the State of Kansas Department of Health and Environment Bulletin 4-2 and amendments thereto. All tanks associated with the treatment, collection and/or disposal of onsite domestic wastewater (including but not limited to septic tanks, holding tanks, pump tanks, treatment unit tanks) shall be constructed of sound, durable materials, not subject to excessive corrosion or decay and shall be watertight, such as concrete, fiberglass or thermoplastics. Each such tank shall be structurally designed to withstand all anticipated earth or other loads and shall be installed level and on a solid bed. Steel septic tanks shall not be permitted.

- A. Tank Requirements. Residential septic tanks shall be a minimum of one thousand (1,000) gallon capacity tanks. Tanks shall be sized according to **Table 2** below.

**Table 2: Minimum and Recommended Septic Tank Capacities Based on the Number of Household Bedrooms.<sup>1</sup>**

Number of Bedrooms	Septic Tank Capacity (gallons) <sup>2</sup>	
	Minimum	Recommended
150 gpd /bedroom		
1-3	1,000 <sup>3</sup>	1,350
4	1,200	1,800
5	1,500	2,250

<sup>1</sup>For each additional bedroom, add 300 gallons to the minimum value and 450 gallons to the recommended value.

<sup>2</sup>Volume held by the tank below the liquid level (invert of the outlet pipe).

<sup>3</sup>Minimum tank size is 1000 gallons.

- B. Pump Tanks.

1. Septic Tank Effluent Pump (STEP) This method involves a two-compartment septic tank with the pump assembly in the second compartment. An approved pump assembly shall be used.
2. Pump Tank. Single or multiple compartment pump tanks shall be precast concrete, fiberglass or polyethylene. The pump tank shall have a minimum capacity of 300 gallons.

All pump tanks shall be equipped with an approved manhole and lid-to-finished grade and shall also be equipped with an approved high water alarm. Any risers shall be brought two inches above grade to prevent infiltration from surface water.

- C. Depth. The access manhole cover must be at least 20” diameter and extended to the finished grade and shall consist of a cast iron ring and lid, or other material, which meets the Administrative Authority’s approval.
- D. Location. The location of the septic system shall be such as to maintain not less than the stated distances as shown in Chapter II, Article III, Section 3.
- E. Site Preparation. The area proposed to be occupied by the private wastewater disposal system shall not be disturbed or compacted prior to system installations. Fencing or other appropriate barriers shall be used to designate this area. During and after installation, care shall be taken to avoid compaction or destruction of the soil profile.

Excavation for septic tank and lateral systems shall not be done in such a manner, or in which site and soil conditions are likely to result in over-compaction of the area.

- F. Lateral Size The linear footage required for lateral system shall be determined based on soil loading rates and the number of bedrooms water usage as outlined in Bulletin 4-2.

- G. Lateral Trench The acceptable absorption trench length shall not exceed one hundred feet (100') and shall be determined based on trench width as provided in **Table 3** of this Article, with a maximum trench depth not to exceed \_\_\_\_ (\_\_) inches.

**Table 3: Trench Separation Distances**

<b>Trench Width (inches)</b>	<b>Recommended Minimum Separation Distance Between Trench Centerline (feet)</b>
18-24	8.0
24-30	8.5
30-36	9.0

- H. Lateral Field. Standard perforated distribution pipe, with a minimum four inch (4") internal diameter (10' length of rigid PVC) shall be used. There shall be a minimum pipe slope of \_\_\_\_\_ inch (\_\_) from outlet end of tank to first lateral trench. Individual distribution pipe shall have a maximum slope of \_\_\_\_\_ inches (\_\_) per one hundred feet (100'). Individual distribution pipe should not exceed one hundred feet (100') from end of lateral trench to trunk line. Distribution lines shall be installed on top of minimum of six inches (6") of washed gravel sized from three quarter inch (3/4") to two inches (2"). Distribution pipe will be covered with a minimum of two inches (2") of washed gravel sized from three quarter inch (3/4") to two inches (2"). The [Administrative Authority] shall approve the fabric material that will be placed over the gravel before backfilling. Serial or "step-down" distribution may be required for excessively sloping yards. Valves or drop boxes may be required on all serial or step-down distribution systems. Depth of the trenches should be a minimum of eighteen inches (18") and shall not exceed \_\_\_\_\_ inches (\_\_).

No part of the lateral field shall be covered by more than twelve inches (12") of backfill. No septic tank lateral field or any portion thereof shall be placed in fill material unless approved by the [Administrative Authority]. All lateral fields shall meet design and construction specifications set forth in the State of Kansas Department of Health and Environment Bulletin 4-2 and amendments thereto.

The lateral field shall be constructed and installed according to requirements approved by the [Administrative Authority] and shall be designed and installed with some method of detection, acceptable to the Department, which allows for and assists in locating the lateral lines in the future.

- I. Connections: Inlet and outlet pipe connected to the septic tank shall be four inch (4") solid pipe with a minimum rating of Schedule 40. Solid lines from the outlet pipe of the septic tank shall be four inch (4") solid pipe with a minimum rating of SDR 35. Materials used in the plumbing, wastewater line, and lateral fields shall meet standards specified by the American Society for Testing and Materials (ASTM).
- J. Prohibited Connections. No roof, driveway, or floor drain shall be connected to a septic tank system.
- K. Additional Requirement for Absorption Field Utilizing Gravelless Lateral Field Technology: The following requirements are in addition to all other requirements noted within this Code:
1. Inspection ports may be required by the [Administrative Authority] for monitoring purposes.

2. The end plates of each chamber trench shall be constructed of plastic, made by the manufacturer of the chambers.
  3. The overhead distribution pipe shall be fed into the top of the chamber (unless otherwise specifically approved by the [Administrative Authority]) with a standard PVC tee fitting. The PVC tee shall extend downward midway into the depth of the chamber.
- L. Alternative Septic Treatment Systems (ASTS): Enhanced treatment of domestic onsite wastewater systems may be considered after thorough assessment by the [Administrative Agency] in areas of marginal suitability for conventional systems. The [Administrative Agency] may require the alternative, experimental and/, or innovative domestic onsite wastewater system to be designed by a professional engineer, or follow criteria developed by a professional engineer. Additional monitoring and reporting requirements of alternative, experimental and/or innovative systems may be required by the [Administrative Agency].
- M. Other Requirements. Any additional construction specification guidelines necessary shall be approved by the [Administrative Authority].

**Section 5. Inspection Requirements**

An inspection shall be made when the system is installed. The tank and pipe shall be in the ground but must be uncovered for the inspector to check the following:

- A. Tank size and inside structure , including inlet and outlet baffles or tees and any risers.
- B. Connections to the house, influent and effluent side of the tank.
- C. The width and depth of trenches for lateral lines.
- D. All solid, un-perforated trunk lines on undisturbed soil and with no rock material in the trunk line ditch.
- E. Depth of gravel in laterals.
- F. Level of pipes and the end of each lateral line capped or interconnected.
- G. Filter material over laterals.
- H. Anticipated depth of fill over laterals.
- I. Quality of all construction materials to assure compliance with minimum standards set forth by the [Administrative Authority].

A second inspection may be made after final grading has occurred, but before occupancy, when determined necessary by the inspector. The inspector will check the following:

- A. Depth of soil over septic tank.
- B. Depth of soil cover over lateral lines.
- C. Contour of soil to assure allowance for water diversion around the lateral field.
- D. Operation of aeration unit (when installed).

## ARTICLE V.

## REQUIREMENTS FOR MOUND SYSTEMS

### Section 1. Permits Required

It shall be unlawful for any person to erect, construct or perform any structurally significant alteration, remove, convert or demolish any mound system without first obtaining the proper construction permit from the [Administrative Authority].

### Section 2. Permit Qualification

A permit authorized under this Article shall be issued, and any mound system operated under the provisions of this Code, shall be approved subject to the qualifications specified in this Section.

- A. Minimum Lot Size. A minimum lot or tract size of \_\_\_\_\_ acres shall be required for use, operation or permittance of any mound system under this Article except as provided in Chapter I, Article VIII of this Code.
- B. Standards. Any mound system permitted or operated under the authority of this Article shall comply with the standards prescribed in this Article and all applicable terms, conditions and requirements of this Code.

### Section 3. General Requirements and Standards

Mound systems shall be permitted only after a thorough site evaluation has been made, and landscaping, dwelling, placement, effect on surface drainage and general topography have been considered. Mound systems shall not be utilized on soils where high groundwater level or bedrock occurs within \_\_\_\_\_ inches (\_\_\_") of the surface.

### Section 4. Design

All mound systems shall be designed by a registered professional engineer, licensed designer, registered sanitarian or professional soils scientist, and approved by the [Administrative Authority]. Required distances from the system, as provided in Article III, **Table 1**, shall apply to the design of mound systems. Construction specifications of septic tanks and laterals, etc. used in a mound system shall comply with the construction standards as provided in Article IV, Section 4.

## ARTICLE VI.

## REQUIREMENTS FOR COMPOSTING/WATERLESS

## TOILETS

### Section 1. Permits Required

It shall be unlawful for any person, firm or corporation to construct, install or perform any modifications to composting or waterless toilets without first obtaining a permit from the [Administrative Authority].

**Section 2. Permit Qualifications**

A permit authorized under this Article, and any composting or waterless toilet operated under the provisions of this Code, shall be approved subject to the qualifications specified in this Section:

- A. Land Use: A composting or waterless toilet system may be permitted or operated only for such uses as seasonal cabins or camping facilities and similar temporary activities where no water supply is available and is approved by a Special Use Permit as provided in the \_\_\_\_\_ County Zoning Regulations.
- B. Minimum Lot Size: The minimum lot size for the use of composting or waterless toilets shall be determined by the \_\_\_\_\_ County Planning and Zoning Commission when considering the approval of the Special Use Permit.
- C. Standards: Anaerobic Unit composting toilets shall have the National Sanitary Foundation Seal of Approval and Testing and comply with the requirements of the KDHE's Environmental Health Handbook. The unit may be electric or non-electric but must be installed with fans for required ventilation.
- D. Maintenance: Composting toilets shall be maintained and cleaned per manufacturer's standards and recommendations. Maintenance records shall be submitted annually to the \_\_\_\_\_ [Administrative Authority].

**Section 3. Privies and Waterless Toilets**

The use of privies for onsite sanitation is prohibited. However, the temporary use of chemical and dry toilets may be allowed in special cases including, but not limited to, public and private events, and construction/repair sites. All waste must be disposed in an approved disposal site. The installation and removal of such facilities shall be subject to the regulations for Sanitary Disposal Service Operators set forth in Article XI of this Chapter.

**ARTICLE VII.**

**REQUIREMENTS FOR HOLDING TANKS**

**Section 1. Permits Required**

It shall be unlawful for any person, firm or corporation to install, perform any modification or structural alteration, convert or use any holding tank without first obtaining a permit from the [Administrative Authority].

**Section 2. Permit Qualifications**

A permit authorized under this Article, and any holding tank used for sanitation purposes operated under the provisions of this Code, shall only be approved subject to the following

qualifications:

- A. Land Use: Holding tanks may only be used for private onsite retentions of wastewater before the contents are removed by a Sanitary Disposal Operator.
  - 1. Holding tanks may be permitted or operated for such uses as seasonal cabins, camping facilities, auctions, public or private schools, golf courses and other recreational activities when such uses are approved by a Special Use Permit as provided in the \_\_\_\_\_ County [Zoning Authority].
  - 2. Holding tanks may be permitted or operated for commercial and industrial tracts or parcels that were in existence prior to the effective date of this Code and subject to the approval of a Variance or Rule Exception as provided in Chapter I, Article VIII, of this Code.
- B. Minimum Lot Size: The minimum lot size required for use, operation or permittance of any holding tank under this Code shall be \_\_\_\_\_ (\_\_) acres or subject to the approval as provided in Chapter I, Articles VI & VIII of this Code.
- C. Standards: Holding tank systems shall only be permitted after a thorough site consideration and evaluation has been made by the [Administrative Authority].

**Section 3. General Requirements and Design**

Prior to the approval for any holding tank system, an analysis of the site shall be prepared by a registered engineer, professional soils scientist or licensed systems designer to include the soil capability, water table, depth to bedrock, is subject to 100 Year Flooding, lot/parcel size and lot/parcel configuration. Any holding tank system authorized under this Article shall be designed, constructed and operated to comply with the following standards and specifications:

- A. Capacity Requirements: The minimum liquid capacity of a holding tank collecting domestic wastewater shall be \_\_\_\_\_ gallons or a minimum \_\_\_\_\_ (\_\_) day holding capacity, whichever is greater. Holding capacity shall be determined on average daily water use.
- B. Site Location: Holding tanks shall be located at least ten (10) feet from any part of a building or structure and a minimum of ten (10) feet from any property boundary. Holding tanks shall be located so as to provide access to an all-weather road or driveway wherein the pumper may drive equipment to within \_\_\_\_\_ (\_\_) feet of the servicing manhole.
- C. Warning Devices: A high water warning device shall be installed so that it activates when water levels reach \_\_\_\_\_ (\_\_) foot below the inlet pipe. Such device shall be an audible and illuminated alarm.

- D. Access Opening: Each tank shall have an access manhole which is extended to finished surrounding grade and shall consist of a circular cast iron ring and lid or other material subject to the approval of the [Administrative Authority]; where a holding tank is accessible to the general public, such manhole lids or covers shall be secured.

**Section 4. Change in Use**

The permit holder shall notify the Administering Agency in writing within \_\_\_\_ (\_\_\_) working days of any change in the use of the premises served by the holding tank, including change of ownership or occupancy.

## ARTICLE VIII. REQUIREMENTS FOR WASTEWATER STABILIZATION PONDS

**Section 1. Permits Required**

It shall be unlawful for any person, firm or corporation to erect, construct or perform any structurally significant alteration, remove, convert or demolish any wastewater stabilization pond (lagoon) regulated by this Code, without first obtaining a permit from Administering Agency. Permits issued under this Article shall be subject to the following qualifications:

- A. Land Use. Permits may be issued under this Article only for an establishment which is not required to hold a Kansas Department of Health and Environment Water Pollution Control Permit. Any wastewater stabilization pond (wastewater lagoon) for industrial uses must be approved by the Kansas Department of Health and Environment.
- B. Minimum Lot Size. Unless a waiver or variance is granted pursuant to Chapter I, Article VIII of this Code, a minimum lot or tract size of \_\_\_\_\_ acres shall be required for any permit issued under this Article.
- C. Standards. No permit shall be issued to any person, property or establishment, which does not comply with and satisfy the specified requirements of all applicable Sections of this Code.

**Section 2. Wastewater Lagoon Design Requirements**

Plans for all wastewater lagoons shall be submitted to the [Administrative Authority] for approval. All wastewater lagoons shall meet design and construction specifications as set forth in the Kansas Environmental Health Handbook.

- A. All wastewater lagoons must be designed and maintained so as not to overflow or discharge.
- B. The completed construction of the wastewater lagoon shall conform to the plans and specifications approved by the [Administrative Authority].



- C. The wastewater lagoon shall be operated in such a manner that a public health nuisance or water pollution problem will not arise.
- D. The normal ground water elevation shall be four (4) feet below the bottom of the lagoon.
- E. A separation distance of \_\_\_\_\_ ( ) feet between the proposed water's edge of the lagoon at the normal pond water depth and the property line of another owner shall be provided.
- F. When the lagoon excavation penetrates or terminates in either a rock strata or a porous (sand or gravel) strata, the excavation shall be extended a distance of one (1) foot on both the bottom and side slopes. The area of supplemental excavation shall be filled with a non-permeable earthen material to limit seepage from the pond. This normally may be accomplished by using a clay soil, which is free of rocks. If a clay soil is not available, the fill soil shall be mixed with bentonite clay at the manufacturers recommended rate and compacted.
- G. A septic tank of a size no less than one-thousand (1,000) gallons may be installed. Effluent from the septic then shall drain by sewer pipe to the lagoon.
- H. If a septic tank is used, the sewer line shall be a four (4) inch solid pipe with a minimum rating of SDR thirty-five (35) with a minimum slope of one-eighth (1/8) inch per foot. A cleanout pipe must be installed before entering the septic tank.
- I. After construction of the lagoon, the builder shall smooth the berm so that no clods, rocks or ruts will interfere with mowing.
- J. A stand of grass shall be established on the berm. This grass should be short-rooted, perennial, such as blue, fescue or brome, and shall be mowed regularly.
- K. The entire lagoon area shall be fenced with a minimum four (4) feet high woven or welded wire fencing with two-inch by four-inch (2" x 4") maximum openings. This fence is to discourage entry by unauthorized persons (especially children), pets and livestock.
- L. A gate of sufficient size and location to accommodate the entrance of a mower must be provided.
- M. Roof drains may not be discharged to the lagoon unless an approved control arrangement is provided to readily facilitate a diversion from the system in the event of heavy precipitation.
- N. Construction of the lagoon must be approved by the [Administrative Authority] before a final occupancy permit will be issued.
- O. Lagoons, where more than twenty-five hundred (2,500) gallons per day of domestic wastewater is processed, may be considered a Public Wastewater Disposal System.
- P. Maintenance is required to remove vegetation at the water's edge, to mow vegetation on embankments and remove trees which shade the pond.

- a. Not maintaining an adequate water level in the lagoon will allow for increased vegetation growth and make it harder to prevent unwanted plants (i.e. smartweed, cattails, cottonwood/willow trees).
- b. The lagoon may have an over-abundance of unfavorable or harmful bacteria or algae due to the lack of incoming water, which could lead to odor issues and mosquito breeding.
- c. The lagoon may have structural issues due to low water levels and insufficient soil saturation (e.g. cracks).

**Section 3. Wastewater Lagoon Separation Distances**

All private onsite systems must meet minimum separation distances outlined in **Table 4**, unless a variance was approved by the [Administrative Authority].

**Table 4: Minimum Separation Distances for Wastewater Stabilization Pond Systems**

<b>Private Onsite Wastewater Disposal System</b>	<b>Minimum distance (feet)</b>
Septic tank to foundation of house or other buildings	10
Any part of a wastewater system to:	
Public potable water line	25
Private potable water line	10
Property line	10
Public water supply, well or suction line	100
Private water supply well or suction line	50
Surface water course	50
Public Utility Lines (not water)	—
Wastewater Stabilization Pond (Lagoon):	
Property line	10' operational water level
Dwelling foundation	__' operational water level
Private or public water line	100' operational water level
Surface water course	50' operational water level

## ARTICLE IX.

### REQUIREMENTS FOR OTHER SYSTEMS

**Section 1. Permits Required**

A permit shall be required for any system authorized or approved under this Article.

**Section 2. Permit Qualifications**

Any permit approved or authorized under this Article shall be issued subject to the qualifications specified in this Section.

- A. Standards. No permit shall be issued to any person, property or establishment which does not comply with and satisfy standards prescribed for the alternative sewage treatment system by the [Administrative Authority] consistent with standards imposed for the systems designated in this Chapter, and all applicable terms, conditions and requirements of this Code.
- B. Minimum Lot Size. Unless a Variance is granted, pursuant to Chapter I, Article VIII, a minimum lot or tract size of \_\_\_\_ ( ) acres shall be required for any permit issued under this Article.

## ARTICLE X.

# REQUIREMENTS FOR ONSITE WASTEWATER SYSTEM INSTALLERS

**Section 1. License Required**

No person shall engage in the installation or repair of an onsite wastewater system unless that person holds a valid license issued by the [Administrative Authority]. Employees of a validly licensed installer are not required to be separately licensed. To receive a license:

- A. Contractors wishing to install or repair onsite wastewater systems in \_\_\_\_\_ County must pass an examination. Multiple employees of a contractor may be licensed. Only the primary owner or manager of the business is required to pass the test. However, if the primary owner or manager of the business is the only individual who obtains a license, then he or she must be physically present at the job site during the installation of the wastewater system.
- B. The examination will test the contractors knowledge of the KDHE Bulletin 4-2 and the \_\_\_\_\_ County Sanitary Code requirements.
- C. The test requires a minimum passing score of \_\_\_\_\_ percent ( \_\_ %). All contractors passing the test will be placed on a list that is sorted alphabetically.
- D. In the event the contractor receives less than an \_\_\_\_\_ percent ( \_\_ %), the contractor will be provided the opportunity to re-test at the [Administrative Authority] Office, after thirty (30) days.

**Section 2. License Term and Renewal**

Any license issued under this Article shall expire on December 31 of each year and must be renewed annually, on or before January 15 of the following year. Applications for licenses and renewals shall be filed on forms supplied by the [Administrative Authority]. All required license fees shall be paid at the time of the application for the license or renewal, and no fee required under this Code shall be prorated or refunded for any partial term or part year application.

**Section 3. Standards of Performance**

Prior to the issuance or renewal of a license under this Article, the applicant shall be required to demonstrate adequate knowledge of the regulations pertaining to onsite wastewater systems and general engineering and geologic principles pertaining to such systems. The administering authority may consider actual experience, education or professional licensing of the applicant in the granting or denial of an application for an initial license or renewal, including prior revocations or disciplinary action.

Attendance by any applicant at an appropriate training workshop, conducted or sponsored by the Administrative Authority or other recognized governmental, educational or professional institution, and satisfactory completion of a written examination administered by or on behalf of the Administrative Authority covering subjects related to public health concerns, wastewater disposal techniques, standards for design or construction or installation of wastewater disposal systems, wastewater treatment theory, and/or hydraulics shall satisfy the requirements of this Section.

**Section 4. Certificate of Insurance**

A licensed Installer shall have and maintain insurance for liability and workmanship in amounts and forms as designated by the Administering Agency, and a copy of the certificate of insurance shall be filed with the Agency.

**Section 5. Code Compliance**

The installation, relocation or repair of any onsite wastewater disposal system shall be in compliance with the provisions of this Code.

**Section 6. License Revocation**

A license may be revoked for failure to comply with this Code. The revocation procedure shall comply with the provisions of Chapter I, Article V, Section 3 of this Code.

**Section 7. Continuing Education**

A requirement for continuing education is set for extended renewal of a wastewater system installer license. The Licensee must complete continuing education approved by the Administrative Agency. The continuing education must be pertinent and related to wastewater treatment. Continuing Education Units (CEU's) must be submitted to the Administrative Agency.

## ARTICLE XI.

### REQUIREMENTS FOR SANITARY DISPOSAL SERVICE

#### OPERATORS

**Section 1. License/Permit Required**

No person may engage in the removal, transport, or disposal of wastewater from any onsite wastewater system or component (holding tank, septic tank, pump tank, portable toilet or grease trap) unless that person holds a valid Sanitary Disposal Service Operator's License. Sanitary

disposal service operators employed under a validly licensed Sanitary Disposal Service are required to be individually licensed by the [Administrative Authority]. Licensed sanitary disposal service operators must have a permit to dispose of wastewater by land application.

**Section 2. License/Permit Term and Renewal**

Any license/permit issued under this Article shall expire on December 31 of each year and must be renewed annually, on or before January 15 of the following year. Applications for licenses/permits and renewals shall be filed on forms supplied by the Administrative Agency. All required license/permit fees shall be paid at the time of application for the license/permit or renewal, and no fee required under this Code shall be prorated, nor refunded for any partial term or part year application.

**Section 3. Standards of Performance**

Every person licensed as a Sanitary Disposal Service Operator under this Article shall comply with the performance requirements specified in this Section.

- A. Cleaning. When cleaning a septic tank, the licensed Sanitary Disposal Service Operator shall remove the liquid, sludge and scum, leaving no more than three (3) inches depth of wastewater.
- B. Sanitary Disposal Service Equipment
  - 1. Maintenance. All equipment used for removing, transporting and/or disposing of wastewater shall be of watertight construction, and be maintained in good condition to ensure that all materials removed from onsite wastewater systems will be transported, without spillage, to an approved point of disposal.
  - 2. Inspection and Registration. All sanitary disposal equipment and vehicles shall be inspected annually by the Administrative Agency for compliance with this Code. Registration of inspected equipment and vehicles will be maintained by the [Administrative Authority], and shall expire one year from date of inspection. Each vehicle shall bear permanent identification clearly identifying the name of the company, the owner and the address of the business.
- C. Disposal. A license/permit holder shall dispose of the collected wastewater in a manner approved by the Administrative Agency. Wastewater shall be acquired, transported, treated and disposed of according to the U.S. Environmental Protection Agency rule 503, and in such a fashion that no surface runoff leaves the property. Discharge of such wastewater is prohibited:
  - 1. Within one-hundred (100) feet of any water well, or
  - 2. Within \_\_\_\_\_ ( ) feet of other properties, or
  - 3. Within thirty-three (33) feet of any surface water body, or
  - 4. Within the 100-year floodplain, or
  - 5. Onto saturated or frozen ground
- D. Records. A license/permit holder shall maintain records of sanitary disposal activity, as outlined in this section. Records shall be immediately submitted to the [Administrative Authority], upon request. The records shall include:

1. Acquisition of Wastewater
  1. Date, location [source], volume (in gallons) of each acquisition [load or partial load] of wastewater or waste transported
  2. Method of treatment, if any treatment occurred
2. Disposal of Wastewater
  - a. Date, location, method of disposal
  - b. Date, description and proof of equipment maintenance performed

The report form must contain the signature of the person submitting the report and must bear the signature or signatures of the responsible person operating the disposal site for each load or partial load received at the site from the contractor.

- E. Experience. Prior to the issuance or renewal of a license, the applicant shall be required to demonstrate adequate knowledge of the regulations pertaining to Sanitary Disposal Service Operators. The [Administrative Authority] may consider prior conduct of the applicant in localities not subject to this Code in the granting or renewal of a license, as well as any prior violations of this Code.
- F. Compliance. The license/permit holder shall comply with all applicable federal, state and local regulations or laws including, but not limited to, those set forth now or hereafter adopted in EPA 40 CFR Part 503 (Standards for the Use or Disposal of Wastewater Sludge, Volume 58, Number 32, Page 9388, of the Federal Register, February 19, 1993), as amended.
- G. Liability for Remediating Spills. Any person who disposes of wastewater on public property without the written consent of the administrative agency shall be liable for the removal of the wastewater, restoration of the area, and the proper disposal of that wastewater, as well as the costs incurred by such remediation.
- H. Certificate of Insurance. A licensed sanitary disposal service operator shall have and maintain insurance for liability and workmanship in amounts and forms as designated by the [Administrative Authority], and a copy of the Certificate of Insurance shall be filed with the Administering Agency.

**Section 4. License Revocation**

A license/permit may be revoked for failure to comply with this Code. The revocation procedure shall comply with the provisions of Chapter I, Article V, Section 3 of this Code.

## ARTICLE XII.

### REQUIREMENTS FOR ONSITE WASTEWATER SYSTEM AND WATER WELL INSPECTORS

**Section 1. License Required**

No person shall engage in the inspection of an onsite wastewater system or water well unless that person holds a valid Wastewater and/or Water Well Inspector License issued by the Administering Agency.

**Section 2. License Term and Renewal**

Any license issued under this Article shall expire on December 31 of each year and must be renewed annually, on or before January 15<sup>th</sup> of the following year. Applications for licenses and renewals shall be filed on forms supplied by the [Administrative Authority]. All required license fees shall be paid at the time of the application for the license or renewal, and no fee required under this Code shall be prorated or refunded for any partial term or part year application.

**Section 3. Standards of Performance**

Prior to the issuance or renewal of a license under this Article, the applicant shall be required to demonstrate ample knowledge of the various kinds of onsite wastewater systems and/or water wells used within \_\_\_\_\_ County and how they relate to the \_\_\_\_\_ County Sanitary Code. The Inspector must be knowledgeable in the general and specific engineering principals of these systems. The [Administrative Authority] may consider actual experience, education or professional licensing of the applicant in granting or the denial of an application for a license or renewal, including prior revocations or disciplinary action.

- A. Applicants must pass an examination. The examination will test the contractors knowledge of the KDHE Bulletin 4-2, K.A.R. 28-30, and the \_\_\_\_\_ County Sanitary Code requirements.
- B. The test requires a minimum passing score of \_\_\_\_\_ percent (\_\_\_%). All inspectors passing the test will be placed on a list that is sorted alphabetically.
- C. In the event the inspector receives less than an \_\_\_\_\_ percent (\_\_\_%), the inspector will be provided the opportunity to re-test at the [Administrative Authority] Office, after thirty (30) days.

**Section 4. Inspector's Bonds**

The [Administrative Authority] may establish a requirement for bonding of any Inspector licensed under this Article and may prescribe reasonable terms and conditions for those bonds.

**Section 5. Certificate of Insurance**

A licensed Inspector shall have and maintain insurance for liability in amounts and forms as designated by the [Administrative Authority] and a copy of the Certificate of Insurance shall be filed with the Agency.

**Section 6. License Revocation**

A license may be revoked for failure to comply with this Code. The revocation procedure shall comply with the provisions of Chapter 1, Article 5, Section 3 of this Code.

## **CHAPTER III GRAYWATER**

# ARTICLE I.

## GRAYWATER SYSTEMS

### Section 1. General System Specifications

Graywater should only originate from a single-family residence that has an approved public or private onsite wastewater system. Wastewater from sources other than from a single-family residence is prohibited in a graywater system.

Wastewater from sinks used for food preparation or disposal, sinks from workshops or garages, dishwashers, bidets, urinals, floor drains, reverse osmosis reject water and other water that has come in contact with toilet waste is defined as blackwater and is prohibited for a graywater reuse system.

The total flow of graywater should not exceed the subsurface drip irrigation system flow, as designed.

An existing or proposed onsite wastewater treatment system should not be reduced in size with the addition of a graywater system.

Graywater System operation:

- A. Graywater should not be applied to food-producing plants.
- B. Graywater should only be used during the growing season.
- C. Graywater should not be applied when the soil is saturated.

### Section 2. Plumbing Specifications

All graywater system components should be designed and manufactured for the intended use of wastewater and/or graywater reuse systems.

The graywater system plumbing should include a diversion valve and an overflow pipe, so graywater is redirected to an approved public or private onsite wastewater system when warranted. Such warranted cases include, but are not limited to: saturated or frozen soils, surface ponding and/or runoff, unusual odors, system back up, clogging of the filter, or when the graywater system has met flow capacity per the approved design calculations.

All installers of the plumbing should meet all licensing, certification, training or registration requirements as required by state and county code, as well as any applicable municipal code.

All piping outside of the house should be schedule-40 pipe or heavier with the exception of the subsurface drip irrigation lines.

All plumbing materials should be clearly labeled to designate their use for graywater.

### Section 3. Subsurface Drip Irrigation Specifications

Irrigation lines should be designed and manufactured for the use of wastewater and/or graywater systems. Irrigation lines designed and manufactured for the use of potable water for use in traditional irrigation systems are prohibited.



The graywater system should utilize a filter designed and manufactured for use with wastewater /graywater and/or subsurface drip irrigation systems.

The filter should be accessible and maintained and cleaned per manufacturer instructions.

All subsurface drip irrigation systems should be designed by a licensed landscape architect, engineer licensed to practice in the State of Kansas, or by a designer licensed by the administrative authority.

All graywater system designs should consider the graywater flow, land use and the vegetation being irrigated, the evapotranspiration rate, the type of soil, the grade of the site, and the total lot size to be irrigated when selecting appropriate tubing, valves, flush points and pipe size.

All installers of subsurface irrigation systems should meet all licensing, certification, training or registration requirements, as required by the administrative authority.

The subsurface drip irrigation system should meet the following setback requirements:

- A. 1 foot from all building foundations;
- B. 2 feet from all property lines and/or easements;
- C. 25 feet from a public water main;
- D. 10 feet from an in-ground swimming pool;
- E. 50 feet from a spring, or from the bank of a surface water course, or from the overflow level (full pool elevation) of a pond, lake, or reservoir;
- F. 50 feet from a private domestic water well or suction line;
- G. 3 feet from the lateral field and tank of an approved private onsite wastewater system; and
- H. 100 feet from a public water supply well.

The subsurface drip irrigation system lines and components should be installed with minimum of 4 inches of soil cover and a maximum of 10 inches of soil cover.

The subsurface drip irrigation system lines and components should be a minimum of 12 inches apart.

If the subsurface drip irrigation system fails or failure is suspected, the owner should divert the graywater to the approved public or private onsite wastewater system until corrected.

#### **Section 4. Tank and Pump Specifications**

All tanks, pumps and related components should be designed and manufactured for the use of wastewater and/or graywater reuse systems.

All tanks and pumps should be installed according to manufacturer specifications.

Design of the graywater system should not allow graywater to be stored in the tank for more than twenty-four (24) hours.

Tanks should meet the separation requirements in Bulletin 4-2 Table 5.

All tank and tank components should be exterior of the home and all structures.

The tank including all extensions to the surface should be watertight to prevent leakage into or out of the tank. It should be structurally sound, meet H-10 loading rate standards, and made of materials resistant to corrosion from soil and acids produced from tank gases. Because of corrosion, steel tanks are prohibited.

Tanks should have an access opening with twenty (20) inches minimum dimension to grade. Any opening extending to the surface should be child and tamper resistant. Ways to accomplish this include lids weighing at least sixty-five (65) pounds, locks, or anchors that are not removable without special tools.

## **Section 5. Variance Requests**

Persons seeking a variance shall submit the variance request to the administrative authority pursuant to Chapter I, Article VIII, Section 1 of this code.

During construction of an approved graywater system, no changes to the design should be made. A new variance shall be required if changes to the graywater system design are made.

If modifications are made to an existing graywater system at any time, a new variance shall be required.

Abandoned or unused graywater systems that have received graywater shall be emptied and plugged in compliance with state law, as outlined in KDHE Bulletin 4-2 (page 6) and K-State Research and Extension Bulletin MF-2246.

Inspections of graywater systems shall be required to the extent private wastewater system inspections are otherwise required.

Graywater system resale inspections shall be required to the extent private onsite wastewater system resale inspections are required by the administrative authority. Upon change of ownership or occupancy, the new owner or tenant should be notified that the residence contains a graywater system.

## **Section 6. Best Practice Recommendations**

It is recommended that graywater system owners maintain records that show the system design and location, identify the fixtures that are the source of the graywater, describe maintenance requirements of this Specification and show how the minimum irrigation area was calculated.

It is recommended that during the growing season the soil is kept at a constant moisture level without over-saturating the soil.

Pathogens, excreta, FOG (Fat, Oil, and Greases) and other impurities exist in a graywater system. Care should be taken to not introduce an excess amount of these items to the graywater system.

The following should be washed in a system that is connected to an approved public or private onsite wastewater system:

- A. Soiled diapers, under garments and bedding.
- B. Bedding, rags, and clothing, etc. from persons infected with the flu, communicable diseases, or other illnesses.
- C. Washing hands that have been in contact with the above items.

Subsurface drip irrigation lines will be shallow. Care should be taken when excavating, coring, or verticutting in a subsurface drip irrigation area.

Use plant friendly products, which are biodegradable, non-toxic and free of salt (sodium), boron (borax), and chlorine bleach. These products can be damaging to plants. Never wash anything containing harsh cleaners or oil.

Beauty products can affect pH levels in graywater and can be harmful to plants.

Avoid contact with graywater and soil irrigated by graywater at all times.

At the beginning of the irrigation season and periodically thereafter check for even distribution of graywater.

Special considerations for homes with lagoons and their function without graywater:

- A. Graywater systems will reduce the amount of flow to a lagoon. This may result in lower water levels and may require the periodic addition of water to a lagoon. Downspouts may be connected to the lagoon as necessary to add water. In drought time, potable water may need to be added to the lagoon. Increased concentration of organic load from toilets and kitchens could lead to odor issues and mosquito breeding in the lagoon.

In designing a graywater system, a backflow valve and drip line relief valve should be considered.

To ensure the graywater system is in working-order and functions as designed, homeowners should be willing to perform yearly/routine maintenance.

Building inspectors should be involved in the permitting process of an approved graywater system if the homeowner resides in a county or municipality with a building code.

**Section 7. Definitions of Specification for Chapter III:**

- A. **Blackwater:** Wastewater from sinks used for food preparation or disposal, sinks from workshops or garages, dishwashers, bidets, urinals, floor drains, reverse osmosis reject water and other water that has come in contact with toilet waste.
- B. **Easement:** An interest in real property consisting of the right to use or control the land, or an area above or below it, for a specific limited purpose benefitting a separate parcel of real property.
- C. **Grade:** The inclination of a physical feature, landform or constructed line to the horizontal.
- D. **Graywater:** Wastewater from sources within single-family residences, including showers, bathtubs, clothes-washing machines, hand-washing lavatories and sinks that are not used for disposal of hazardous or toxic ingredients.
- E. **Graywater System:** A system used to recycle or reuse graywater for a purpose, instead of disposing the graywater to an onsite wastewater system or a public sewer system that contains plumbing from applicable sources, a diversion and overflow valve, a filter, a pump, a tank and subsurface drip irrigation lines.

- F. Growing Season: A period of time in a year when plant growth occurs, on average in Kansas, this time period ranges from 180 to 190 days between March 1st and October 31st annually.
- G. H-10 Loading Rate Standard: A structural load rate of 16,000 lb/axle and following manufacturer's recommendation for amount of properly compacted fill.
- H. Public Water Supply: A system for the provision to the public of piped water for human consumption, if such system has at least ten (10) service connections or regularly serves an average of at least twenty-five (25) individuals daily at least sixty (60) days out of the year.
- I. Resale Inspection: A procedure performed by the local authority to determine the functional status of a private onsite wastewater system prior to the conveyance of property.
- J. Schedule-40 Pipe: Pipe that has a wall thickness of 6.02 millimeters (mm), and the bored hole for stream movement is 102.26 mm in diameter.
- K. Setback Requirements: A distance from one location to another location, between which installation is prohibited.
- L. Single-family Residence: A house that is not used for multi-residential, commercial, or other nonresidential purpose.
- M. Subsurface Drip Irrigation System: A network of pipes or tubes for controlled delivery of graywater directly to plants.
- N. Suction Line: A pipe or tubing feeding into the inlet of a fluid impelling device (for example, pump, compressor or blower), consequently under suction.
- O. Variance: An official authorization from KDHE or a local authority to depart from wastewater management regulations.
- P. Wastewater: Any water that contains waste products; for example, water used for washing, flushing or in a manufacturing process.

## CHAPTER IV. Water Supplies

### ARTICLE I.

#### PURPOSE AND INTENT

The provisions of this chapter are for the purpose of regulating and controlling the development, maintenance, and use of all water supplies which are or may be intended for domestic use, other than public water supplies, in \_\_\_\_\_ County, Kansas, in order that public health will be protected and the contamination and pollution of the water resources of the county will be prevented.

**Section 1. Compliance Required.**

After the effective date of this Code, no person shall construct or reconstruct on any property subject to this Code, any public, non-public or onsite water (private wells) supply that does not comply with the requirements of this Code.

## ARTICLE II. DEFINITIONS

In addition to the definitions provided in other chapters of this code, the words, terms and phrases listed below, for purposes of this Chapter IV, are as follows:

- A. **Abandoned Water Well:** a water well determined by the department to meet at least one of the following conditions:
  - 1. Use of the water well has been permanently discontinued.
  - 2. Pumping equipment has been permanently removed from the water well.
  - 3. The water well either is in such disrepair that it cannot be used to supply water or has the potential for transmitting surface contaminants into the aquifer, or both.
  - 4. The water well poses potential health and safety hazards.
  - 5. The water well is in such a condition that it is not an active well or cannot be placed in inactive status.
  
- B. **Active Well:** a water well which is an operating well used to withdraw water, or monitor or observe groundwater conditions.
  
- C. **Aquifer:** an underground formation that contains and is capable of transmitting groundwater.
  
- D. **Backflow:** the undesirable reversal of flow of water or mixtures of water and other liquids, gases or other substances into the distribution pipes of the potable supply of water from any source or sources.
  
- E. **Confined Aquifer:** an aquifer overlain and underlain by impermeable layers.
  
- F. **Construction of Water Wells:** all acts necessary to obtain groundwater for private, public or commercial use, by any method.
  
- G. **Domestic Uses:** the use of water by any person or family unit or household for household purposes, or for the watering of poultry, farm and domestic animals used in operating a farm, or for the watering of less than one thousand (1,000) head of livestock, or for the irrigating of lands not exceeding a total of two acres in area for the growing of gardens, orchards and lawns.
  
- H. **Groundwater:** the part of the subsurface water which is in the zone of saturation. Groundwater in a confined aquifer is under pressure greater than atmospheric pressure and will rise in a well above the point at which it is first encountered.
  
- I. **Grout:** cement grout, neat cement grout, bentonite clay grout or other material approved by the Kansas Department of Health and Environment (KDHE) used to create a permanent impervious watertight bond between the casing and the undisturbed formation surrounding the casing or between two or more strings of casing.
  
- J. **Inactive Status:** a water well which is not presently operating but is maintained in such a way it can be put back in operation with a minimum of effort.
  
- K. **License:** a document issued by the Kansas Department of Health and Environment to qualified persons making application therefore, authorizing such persons to engage in the business of water well contracting.

- L. Potable Water: water free from impurities and carcinogens in amounts sufficient to cause disease or harmful psychological effects in humans and conforming with the latest KDHE regulations.
- M. Private Water Supply: private water supply for domestic use, containing no more than two (2) service connections and serving no more than twenty-four (24) people per year.
- N. Public Water Supply System: a system for delivery to the public of piped water for human consumption that has at least ten (10) service connections or regularly serves at least twenty-five (25) individuals daily at least sixty (60) days out of the year. This term includes any source, treatment, storage or distribution facilities used in connection with the water supply system.
- O. Pump Pit: a watertight structure constructed at least two feet away from the water well and below ground level to prevent freezing of pumped groundwater and which houses the pump or pressure tank, distribution lines, electrical controls or other appurtenances.
- P. Reconstructed Water Well: an existing well that has been deepened or has had the casing replaced, repaired, added to or modified in any way for the purpose of obtaining groundwater.
- Q. Sanitary Well Seal: a manufactured seal, approved by the Kansas Department of Health and Environment and the Administrative Agency, installed at the top of the well casing which, when installed, creates an air and watertight seal to prevent contaminated or polluted water from gaining access to the groundwater supply.
- R. Semi-Private Water Supply: a private water supply for domestic use, containing three (3) to nine (9) service connections and serving no more than twenty-four (24) individuals at least 60 days out of the year.
- S. Spring: the point at which groundwater is naturally discharged at the earth's surface.
- T. Static Water Level: the highest point below or above ground level which the groundwater in the well reaches naturally.
- U. Test Hole or Hole: any excavation constructed for the purpose of determining the geologic, hydrologic and water quality characteristics of underground formations.
- V. Treatment: the stimulation of the production of groundwater from a water well through the use of hydrochloric acid, muratic acid, sulfamic acid, calcium or sodium hypochlorite, polyphosphates or other chemicals, and mechanical means, to reduce or remove iron and manganese hydroxide and oxide deposits, calcium and magnesium carbonate deposits, and slime deposits associated with iron or manganese bacterial growths that inhibit the movement of groundwater into the water well. Shock Chlorination is a disinfection treatment, widely recommended means of treating bacterial contamination by introducing very high levels of chlorine into a water system.
- W. Unconfined Aquifer: an aquifer containing groundwater at atmospheric pressure. The upper surface of the groundwater in an unconfined aquifer is the water table.
- X. Water District: Any special district authorized and empowered by state statutes to plan, construct and/or operate a public water supply system.
- Y. Water Well: Any excavation that is drilled, cored, bored, washed, driven, dug, jetted or otherwise constructed, when the intended use of such excavation is for the location, diversion, artificial recharge or acquisition of groundwater.

- Z. WWC-5 Form: Also known as a ‘water well record.’ While the WWC-5 Form or ‘water well record’ may be used to report a well that has been constructed, reconstructed, or plugged, the WWC-5P Form or ‘water well plugging record’ was developed subsequently to report a plugged water well. Any licensed water well contractors, as well as any landowner, “...who construct, reconstruct, or plugs a water well shall keep a careful and accurate log of the construction, reconstruction or plugging of such well and shall furnish a record of said well log to the secretary within thirty (30) days after completion of such well in such form as the secretary might require.”

## ARTICLE III. STANDARDS & REQUIREMENTS

### Section 1. Purpose and Intent of Article

The provisions of this article have been adopted for the purpose of regulating and controlling the construction, maintenance and use of public and private water supplies of the county to the end that public health will be protected and the contamination and pollution of the water resources of the county will be prevented.

### Section 2. Compliance Required

- A. No person shall construct on any property subject to the provisions of this chapter, any public, semi-public, or private water supply that does not comply with the requirements of this chapter.
- B. No dwelling shall be occupied that does not have water supplied under pressure to that dwelling.
- C. No sale or conveyance of any real property shall be complete until all abandoned wells on such real property are plugged. Dug wells on real property shall be plugged or reconstructed in accordance with K.A.R. 28-30-1 through 28-30-10 et seq., as amended.

### Section 3. Requirements - Public Water Supplies

- A. **Permit to operate.** No person shall operate a public water supply without obtaining a public water supply permit from KDHE.
- B. **Approval of plans.** No person shall construct any public water supply on any property subject to the provisions of this chapter until the plans and specifications have been submitted to and approved in writing by KDHE.

### Section 4. Requirements - Semi-public Water Supplies

- A. **Permit to construct.** No person shall drill, develop or construct any semi-public water supply on any premises for domestic use subject to regulations of this chapter until they have obtained a permit from the Administrative Agency.
- B. **Minimum water testing standards.** Semi-public water supplies shall be tested annually for coliform bacteria and annually for nitrate. Results of the testing shall be submitted to the Administrative Agency. Testing shall be done by a lab approved by the Administrative Agency. The Administrative Agency shall reserve the right to require additional testing if,

in their opinion, a potential exists for other contaminants. If either coliform bacteria are present or nitrate exceeds the Maximum Contaminant Level (MCL), the end users of the semi-public water supply shall be notified in writing by the Administrative Agency, to their residence within 10 days of receipt of results. The semi-public water supply shall be treated in accordance with requirements set by the Administrative Agency.

- C. **Approval of plans.** No person shall construct, after adoption of this chapter, any semi-public water supply on any property subject to the provisions of this chapter until the plans and specifications have been submitted to and approved, following minimum standards found in K.A.R. 28-30-1 through 28-30-10 et seq., in writing by the Administrative Agency.

## **Section 5. Requirements - Private Water Supplies**

- A. **Permit to construct.** No person shall drill, develop or construct any private water supply on any premises for domestic use subject to regulations of this chapter until they have obtained a permit therefore from the Administrative Agency.
- B. **Approval of plans.** No permit to construct or develop a private water supply on any premises subject to the regulations of this chapter shall be issued until the plans showing the locations and construction of the supply have been approved by the Administrative Agency.
- C. **Inspections for transfer of property.** Whenever any property connected to, or served by, a private water supply is offered for or subject to a contract of sale, the Administrative Agency shall evaluate the condition of the well, the area surrounding the well, and the well water, at a fee to be paid to the Administrative Agency. A water sample shall be taken and screened for bacteria, nitrate, and chloride and reported as Environmental Protection Agency's (EPAs) primary and secondary Maximum Contaminate Levels (MCL's). Any inspection provided under this section shall not constitute nor be deemed a warranty and neither the Administrative Agency nor any official of the Board of Health shall be liable for any future failures of the system or for other claims arising out of the inspection. Inspection shall not relieve any person of compliance with the requirements of this Code.
- D. **Water testing for daycare facilities.** Where a private water supply serves a daycare, a water sample shall be screened annually for bacteria and nitrate. Results of the testing shall be submitted to the Administrative Agency. Testing shall be done by a lab approved by the Administrative Agency. The Administrative Agency shall reserve the right to require additional testing if, in their opinion, a potential exists for other contaminants. If either coliform bacteria are present or nitrate exceeds the Maximum Contaminant Level (MCL), the owners of the daycare shall be notified in writing within 10 days of receipt of results. The daycare water supply shall be treated in accordance with requirements set by the Administrative Agency.
- E. **Use limitation.** Use of surface water (lakes, ponds or streams) as a source of water for a private water supply shall not be permitted:
  - 1. Where a public water supply line is available; or
  - 2. Where a satisfactory groundwater source is available; or
  - 3. Unless adequate treatment is provided, in no case shall surface water be used without filtration and chlorination; or



4. Where the pond or lake receives any drainage or discharges from septic tanks or sewage treatment plants.

**Section 6. Minimum Standards for Groundwater Supplies.**

- A. **Location.** All wells used as sources of water for private water supplies shall be separated from the specified sources of pollution by distances equal to or greater than those shown in the following table (**Table 5**). The Administrative Agency shall determine the minimum distances that shall be provided between a well and other potential sources of contamination. Such distances shall be sufficient to provide reasonable assurance that the well will not be contaminated.

**Table 5: Minimum Standards for Groundwater Supplies**

<b>Groundwater Supplies</b>	<b>Minimum Separation (feet)</b>
Subsurface absorption field for septic tank effluent	50
Watertight vaulted pit privy	50
Septic tank	50
Streams, lakes, and ponds	50
Barnyard, stables, manure piles, animal pens, etc.	50
Sewer lines not constructed of cast iron or other equally tight construction	50
Sewer lines constructed of cast iron or other equally tight construction	10
Property lines	25
Petroleum and fertilizer storage	50
House/outbuilding	50
Lagoon	50

- B. **Construction.** The enforcement of this section shall be regulated in accordance with K.A.R. 28-30-2 through 28-30-10 et seq., as amended. Recommended standards for design, construction and location; and practices consistent with current approved technology shall be followed.

**Section 7. Requirements for Subdivision Development.**

No person shall develop any subdivision until the plans and specifications for water supply provision and/or protection have been approved by the Administrative Agency.

**Section 8. Water Well Pump Installer and Maintenance Licensure.**

No person shall repair or install a water well pump unless they hold a valid Water Well Pump Installer and Maintenance License from the Administrative Agency. Property owners are exempt from the license, but not exempt from provisions of the code. An annual fee shall be

paid to the Administrative Agency by January 1 of each year, following the initial issuance of the Water Well Pump Installer and Maintenance License. A license issued under the provisions of this Chapter may be revoked for violation of any of the terms of this Code. No person responsible for operating a private well or semi-public well shall contract, or offer to contract, with any person for services unless that person holds a valid permit or license to provide such service from the Administrative Agency.