

Sanitation/Environmental Code
of Lyon County, Kansas
Chapter 2

Sewage and Excreta Disposal

2-1.0 PURPOSE AND INTENT

Sewage is a potential source of disease and water pollution, and a hazard to the health, safety, and welfare of the public. The health, safety and welfare of the public are at increased risk of disease from exposure to raw sewage. It is the purpose of this chapter of the Lyon County Sanitation/Environmental Code to provide minimum standards for the location, design, construction, maintenance and use of on-site wastewater systems, and the removal, treatment, and disposal of materials from such facilities within the legal boundaries of Lyon County, Kansas. (For more information, see Appendix B.)

2-1.1 Title.

This chapter shall be known and referred to as the Sewage and Excreta Disposal Code.

2-2.0 EFFECTIVE DATE

This code shall become effective on the _____ day of _____, 200_____.

2-3.0 APPLICABILITY

The procedures prescribed in this chapter must be followed in administering this code and any amendments thereto. Provisions **shall apply to all lands located in unincorporated areas of Lyon County, Kansas** which contain 10 acres or less, or a residential site, or land not used for agricultural purposes under the ownership of one person as defined in Section 1-4.12. Such wide application of this code is

necessary to protect the health of the inhabitants of Lyon County and the waters of the State of Kansas.

This code does not apply to livestock waste systems that are regulated by the State of Kansas.

2-4.0 DEFINITIONS

Words, terms, and phrases appropriate or applicable to Chapter 2 of the Lyon County Sanitation/Environmental Code are defined as follows:

2-4.1 Alternative and Experimental Wastewater Systems mean any private wastewater systems other than a wastewater stabilization pond, a septic tank/absorption field, or a sanitary privy that are used or designed to be used to collect, treat, and hold, or discharge sewage from residential, industrial or commercial property under one ownership. **Experimental wastewater systems** must be determined by the Director of Environmental Health to have a reasonable probability of successful operation in Lyon County. To obtain classification as an **alternative wastewater system**, a minimum of ten (10) experimental systems of any specific type must have been installed and have proven to operate adequately for a period of at least ten (10) years in Lyon County as determined and approved by the Director of Environmental Health.

2-4.2 Distances means horizontal distances unless otherwise designated. Measurements referred to as "not less than", "minimum", "at least" and other similar designations mean horizontal distances unless specifically indicated otherwise.

2-4.3 Domestic Wastewater means water-borne wastes produced at family dwellings in connection with ordinary family living and originating primarily from kitchen, bathroom and laundry sources, including waste from food preparation, dishwashing, garbage grinding, toilets, baths, showers, and sinks. Domestic

wastewater does not mean storm water, water from foundation drains or cooling water.

2-4.4 Drainage Course means any stream, perennial or intermittent; spring; body of surface water; marsh; swamp; canal; ditch; or other natural or man-made water way. The 1981 Lyon County Soil Survey or document subsequently approved by the Director of Environmental Health shall be used as a reference to determine which waterways must be considered a drainage course.

2-4.5 Experimental Wastewater System (See Section 2-4.1)

2-4.6 Human Excreta means the body wastes from humans (feces, urine, and other bodily discharges).

2-4.7 Injection Wells (Class V) means a Septic tank/leach field receiving only domestic wastewater and having the potential to serve 20 or more persons a day or any septic system receiving non-domestic wastewater.

2-4.8 Intermittent Stream means a stream or portion of a stream that flows only in direct response to precipitation. It receives little or no water from springs and no long-continued supply from melting snow or other sources.

2-4.9 Industrial and Commercial Wastewater means any and all liquid or water-borne wastes produced in connection with any industrial or commercial process or operation.

2-4.10 Lagoon or Wastewater Stabilization Pond means a fenced surface water body normally designed to operate with a three to five foot liquid depth and which treats sewage. Treatment in the water occurs as a result of sunlight, wind action, and microbial action. Percolation of water downward is limited by the required tight clayey soil conditions. A four foot separation is required between the soil wastewater interface and any groundwater. No wastewater is allowed to discharge to the surface of the ground or to surface bodies of water. Water is removed primarily through evaporation. Such a system requires installation in a

soil having a percolation rate of slower than 60 minutes per inch. Such systems must meet appropriate fencing standards.

2-4.11 Liner means any liner approved by the Administrative Agency based on KDHE information or technical assistance.

2-4.12 Private Wastewater System means any system that does not hold a Kansas Water Pollution Control Permit pursuant to K.S.A. 65-165. This includes wastewater treatment systems which function primarily by soil absorption, evaporation, transpiration, holding tanks, or any combination of the above.

2-4.13 Public Wastewater System means a sewer system that is used, or designed to be used, for the collection, treatment and discharge of domestic sewage, industrial, or commercial wastes from:

- 1) two or more family dwellings, with exceptions as found in Section 2 -5.8
- 2) two or more spaces in a trailer, mobile, or manufactured home park,
- 3) two or more lots or properties located in platted subdivisions, or
- 4) two or more commercial properties, or
- 5) all industrial properties.

2-4.14 Sanitary Privy means a non-mobile, waterless facility designed for the disposal of wastes from the human body. Such structure is separate from the residence and consists of roof, walls, floor, door, and watertight vault.

2-4.15 Sanitary Service means the pumping out and/or removal of sewage, sludge, or human excreta from any source, including but not limited to: sanitary privies, vaults, septic tanks, waterless sewage systems, private wastewater systems, or public wastewater systems and the transportation of such material to a point of temporary storage or final disposal. It shall also mean the pumping out and/or removal of wastewater from industrial or commercial establishments and the transportation of such waste to a point of temporary storage or final disposal.

2-4.16 Seepage Pit means a subsurface excavation deeper than three (3) feet that is filled or lined with rock or gravel and receives treated or untreated wastewater.

- 2-4.17 Septage** means domestic sewage, industrial, manufacturing or commercial waste, or human excreta not disposed of through direct connection into a publicly owned wastewater treatment system or municipal wastewater treatment system.
- 2-4.18 Sewage or Wastewater** means any substance that contains any of the urine, feces or other discharges from the bodies of human beings or animals, or chemical or other wastes from domestic, commercial, manufacturing, or other forms of industry.
- 2-4.19 Sewer District** means a special entity authorized and empowered by state statutes to plan, construct, and operate a public wastewater system.
- 2-4.20 Soil Absorption System** means that portion of a sewage treatment system that places wastewater below the surface of and in direct contact with the soil. The soil filters and treats the wastewater after it leaves a containment tank and before it enters the groundwater. No wastewater is allowed to be discharged to the surface of the ground. Pollutants are removed through microbial action which occurs in the soil. Water is removed through percolation down through the soil and evapo-transpiration via the planted grass. Detailed minimum specifications can be found in this code in Section 2, Page 19 of 35 and Minimum Standards for Design and Construction of Onsite Wastewater Systems (Bulletin 4-2, KDHE, KSU, 1997).
- 2-4.21 Subdivision** means any division of land that is or has been subdivided into two or more lots for the purpose of transfer of ownership or building development, whether immediate or future including the streets, alleys or other portions thereof intended to be dedicated for public use; and any re-subdivision of lands or lots.
- 2-4.22 Vault or Holding Tank** means a watertight receptacle for the retention of sewage either before, during or after treatment.
- 2-4.23 Wastewater System** means any system along with the pipes and all appurtenances related to the collection and treatment of domestic sewage, industrial, or commercial wastes.

2-4.24 Waterless Sewage System means a facility designed for the treatment of non-water carried sewage. This includes but is not limited to: chemical toilets, both portable and non-portable toilets, incinerator type toilets, and composting type toilets.

2-5.0 PROHIBITED PRACTICES

2-5.1 Use-of-Non-Approved Private Systems.

After publication of this code, any newly constructed private wastewater system may not be sold, used, leased, or rented for use, until it has been inspected and approved by the Administrative Agency.

Use of an existing system will be prohibited if the system:

- 1) has been temporarily or permanently enjoined as a public health nuisance by a court of competent jurisdiction; or
- 2) fails to comply with the timeframes for repairs and maintenance as listed in Section 2-6.6 and conditions for failure as listed in Section 2-18.0 of this sanitation/environmental code and written notice thereof has been given to the owner or responsible person, by the Administrative Agency;
or
- 3) discharges inadequately treated sewage onto the surface of the ground,
or
- 4) discharges inadequately treated sewage into any "waters of the state" as defined in K.S.A. 65-161 including but not limited to any impoundment owned by any federal, state or local governmental agency, or owned by any private individual, or
- 5) receives non-domestic wastewater.

2-5.2 Discharge of Non-Domestic Waste.

No cooling water, discharge from roof drains, discharge from footing tile drains or swimming pool wastewater shall be directed to the private sewage treatment or wastewater treatment system. No automotive grease, oil, antifreeze or toxic or hazardous waste from a commercial or manufacturing business or waste other than domestic waste shall be discharged into a private sewage disposal or into a private wastewater treatment system. With permission of the Administrative

Agency, one or more roof downspouts subsurface drains and/or sump pumps can be added to the wastewater stabilization pond. However, a way must be provided to easily divert this water from the wastewater stabilization pond during wet periods. Discharge of the following into any private wastewater system is prohibited:

- 1) swimming pool wastewater
- 2) automotive grease
- 3) oil
- 4) antifreeze
- 5) toxic or hazardous waste
- 6) waste other than domestic waste

2-5.3 Use of Private Systems Within 500 Feet of Public Sewer.

Private wastewater systems shall not be constructed or reconstructed within 500 feet of an existing public sewer unless the Administrative Agency finds that connection to such a sewer is not feasible and that a private sewerage system, meeting the requirements of this code, can be constructed on the property.

2-5.4 Location of Private Wastewater Systems Below Full Flood Pool.

Any portion of a private wastewater system shall not be located below the full flood pool elevation of any federal reservoir or full pool elevations of any pond, lake or water supply reservoir. Pre-existing private wastewater systems not in failure may be granted a variance. See Section 2-17.0. The Corps of Engineers has established elevations for the location of structures within the flood plain of John Redmond Reservoir. Under no circumstance will the Administrative Agency permit or grant a variance for a system that has not been approved by the Corps of Engineers. Other situations must meet conditions as established by the Administrative Agency.

2-5.5 Location of a Private Wastewater System Within the 100 Year Flood Plain.

Any portion of a private wastewater system shall not be located within the 100 year flood plain. Pre-existing private wastewater systems not in failure will be grandfathered. See Section 2-18.0.

2-5.6 Location of Private Wastewater System Within 100 Feet of a Water Well.

Any portion of a private wastewater system shall not be located less than 100 feet from any water well or a pump suction line from any water well, unless the private wastewater system be of water tight construction. No sanitary sewer line, shall be located less than ten (10) feet from a water well or a suction line from a water well, unless such piping is cased for ten (10) feet in both directions. Abandoned water wells and water wells that are not currently in use are not exempt from this restriction.

2-5.7 Connection to Public Wastewater System.

Premises shall not be permitted to connect to any public wastewater system that does not hold a valid permit from the Kansas Department of Health and Environment as required in Section 2-10.3 of Chapter 2.

2-5.8 Number of Residences Served by a Single Wastewater Treatment System Limited.

It is prohibited for two or more residences to connect to the same wastewater treatment system. Exceptions may be made if all of the following conditions are met:

- 1) a wastewater system can be located, designed, and constructed or reconstructed to treat the actual wastewater flow from both the residences;
- 2) only one (1) additional home may be allowed to connect to the private wastewater system if the family that occupies it is related by blood or marriage to the occupant of the main dwelling, or only one (1) additional home may be allowed to connect to the private wastewater system if the family that occupies it is employed on the farm;

- 3) on each site there is adequate space reserved and the correct soil conditions exist to permit the replacement of the single private wastewater system with separate individual systems when the properties are separated in the future;
- 4) the second connection will be removed when either or both housing units change ownership,
- 5) after disconnection a system will be properly designed, constructed, and operated for each individual housing unit separately.
- 6) the water supply serving both homes is of sufficient quality and quantity to meet the needs and protect the health of both households.

2-5.9 Seepage Pits.

Seepage pits are prohibited.

2-5.10 Injection Wells (Class V).

Class V Injection Wells are prohibited by Kansas law (K.A.R. 24-46).

2-6.0 REQUIREMENTS FOR PRIVATE WASTEWATER TREATMENT SYSTEMS

2-6.1 Permit to Construct or Repair Required.

For private wastewater systems receiving an estimated 2500 gallons or less of wastewater per day, all required application materials, plans and specifications must be received and approved by the Administrative Agency prior to the development, construction, modification or repair of such systems by any person. A site of comparable size reserved for future replacement of the wastewater system is strongly encouraged. (See Appendix B for details.) The Administrative Agency shall issue a written permit, valid for 90 days, to construct or repair a wastewater system on completion of:

- 1) written application form and all other required application materials, and
- 2) the approval of the site and the design for the private wastewater system.

References approved by the Kansas Department of Health and Environment shall be used as a guide by the Administrative Agency in reviewing and approving plans for private wastewater treatment systems. The Administrative Agency shall establish minimum standards of installation and operation.

Inspection may be required for repair or replacement at the discretion of the Administrative Agency. An application for permit is required for any system in need of repairs which does not hold a permit.

2-6.2 Exemption from Permit Requirement.

No permit shall be required for the following:

- 1) Repairs which stop leaks in the building interior drains, soil pipes, waste pipes, or vent pipes.
- 2) The clearing of stoppages or the repairing of leaks in pipes provided such repairs do not involve or require the addition or rearrangement of pipes.
- 3) Repair or replacement of the pipes between the house and the septic tank or between the house and the lagoon.
- 4) Minor fence repair.

2-6.3 New Site Inspection Required.

A new site shall not be approved for a private wastewater system until the Administrative Agency has inspected the site for compliance with this Sanitation/Environmental Code. Construction must not begin on any structure or building until the site for the private wastewater system has been approved.

2-6.4 Construction Inspection Required.

All private wastewater systems developed or modified after the effective date of this Sanitation/Environmental Code must be inspected and approved by the Administrative Agency for compliance with approved plans. No portion of any system shall be covered or made inaccessible to inspection prior to approval.

2-6.5 Final Inspection Required.

The Administrative Agency shall make a final inspection of the completed system prior to issuing a permit to use the private wastewater system. A permit shall be issued after final inspection of the private wastewater system.

2-6.6 Permit of Existing Systems Required.

All existing systems will come into compliance with this code within eleven (11) years from the date of adoption of this code. Section 2-17.0 defines exceptions to this requirement. The eleven-year period will begin with a year of educational sessions offered by the Administrative Agency to all landowners who desire to learn about regulatory requirements related to the use of private wastewater systems. After the year of education, the regular inspection of systems will occur over the next 10 years. Permitting will begin in areas of the county most susceptible to pollution as determined by the Director of Environmental Health and after that shall continue from near a central point within the county and move outward by section lines. Such central point shall be the intersection of 6th Street and Commercial Street in the city of Emporia, Kansas. A notice must be mailed to the property owner prior to making a visit to the property. Such notice must state that an inspection will be made in not less than thirty (30) days and will request that the owner notify the Administrative Agency if they desire to be present. System inspection of landowners who attend one of the educational sessions will occur in one of the last four years of the eleven-year cycle.

Any private wastewater system that is creating a public health hazard will not be issued a permit and must come into compliance. Failures will be assigned a level of severity. The period allowed for compliance will be controlled by the severity level. The following table illustrates severity levels and periods allowed for correction. For extenuating circumstances, see Variances – Section 2-17.0.

Level	Time Frame	Reason for Failure
1	As soon as possible but no longer than 3 months.	Overflow; discharge; seepage surfacing
2	Construction or repair should commence within 1 year and be completed within 2 years	Fence requirements
3	Vegetation removal shall commence within 1 year and continue until vegetation is controlled	Tree, duckweed and cattail removal; vegetation height

Following the period for compliance a follow-up visit will be conducted by the Administrative Agency. A notice must be mailed to the property owner prior to making a visit to the property. Such notice must state that the follow-up inspection will be made in not less than thirty (30) days. If the system now meets the current guidelines of this Sanitation/Environmental Code, a permit will be issued.

2-6.7 Permit Renewal Required.

Following the initial 11 year period, for the next 10 years inspection will occur only at time of sale, transfer, complaint, and/or for new construction. Following this 10-year period, another 1 year of education and 10 years of formal inspecting and re-permitting of all private wastewater systems will occur. This process will be repeated in this manner for the lifetime of this code.

2-6.8 Rental and Leased Properties.

Landlords shall maintain private wastewater systems on their rental properties so the systems are not in failure.

2-6.9 Approval for Construction on New Residential Site.

A new residential site shall not be approved if:

- 1) connection to an approved public wastewater system is feasible, or
- 2) the site violates the provisions of Section 2-5.0 of this code, or
- 3) the site contains less than six and two-thirds (6 2/3) acres of land as measured from the center of the rights-of-way which are usually the centers of the roads, streets, or other public rights-of-way or public

easements unless variance has been granted for previously platted tracts; or,

- 4) the site is located on an access easement or right of way, or
- 5) the soil, topography, and geology do not meet the requirements set forth in Section 2-7.0.

See Sections 2-17, Variance, and 2-18, Previously Constructed Sewage Systems.

2-6.10 Setbacks Required.

Setback distances are as follows:

- 1) Wastewater Stabilization Ponds to property line.....50 feet
(Measured from the five (5) foot operational water line.)
- 2) Soil Absorption Systems to property line.....50 feet
(Measured from any subsurface portion of the system.)
- 3) Alternative Systems to property line.....50 feet
(Measured from any subsurface portion of the system.)
- 4) Waterless sewage systems to property line.....50 feet
(Measured from any subsurface portion of the system.)
- 5) Any wastewater system to any water well.....100 feet
(Including wells which are either in use, inactive, or abandoned).

Note: Abandoned wells must be plugged in accordance with Section 3-13.0.

- 6) Any wastewater system to surface water..... 50 feet

2-6.11 Waiver of Setback Distances.

A waiver of setback distances established in Section 2-6.10 may be granted by the Administrative Agency under the following conditions:

- 1) Request for waiver is made prior to construction of the wastewater system; and

- 2) Acceptable evidence is provided to the Administrative Agency to establish such a waiver is not likely to contaminate the waters of the State of Kansas or create a public nuisance; and
- 3) Setback distances may be no closer than the minimum distances established in the Kansas Department of Health and Environment Bulletin 4-2; and
- 4) In unusual circumstances a legal easement may be obtained to allow the location of a sewage system up to but no closer than five (5) feet of the adjoining property line, if legal easement for such location is provided by the adjoining property owner and recorded with the Register of Deeds. As a part of that easement, the adjoining property owner must agree not to place a well closer than one hundred (100) feet to the sewage system; and
- 5) See Sections 2-5.6 and 2-6.10 for locations adjacent to water wells.

2-6.12 Maintenance and Operation.

All persons holding a permit for use of a private wastewater system are responsible for its proper operation and maintenance. Permit holders must maintain the system in conformity with original design specifications and in good working condition. Standard operation practices recommended by the Kansas Department of Health and Environment must be followed in the operation of such systems except where the Lyon County Sanitation/Environmental Code requires a greater degree of compliance.

Current educational information on maintenance and operation shall be developed and maintained by the Administrative Agency and shall be available to the public.

Permit holders should observe the following maintenance guidelines which help to avoid failure as defined in Section 2-18.0:

1) For Lagoons or Wastewater Stabilization Ponds

- Retain the effluent within the wastewater system and not allow discharge onto the surface of the ground, into the waters of the state, or into any ditch or water course;
- Keep the system free of habitat which favors vector breeding;
- Avoid wastewater other than domestic wastewater such as shop and garage floor drains with oils and greases;
- Adequately limit vegetation growth on, in, or around the private wastewater system;
- Maintain fencing in good condition to prevent access by children, pets, toys and/or livestock and to allow access by equipment necessary to control vegetation;
- Avoid building, parking or driving on or over sewer pipes;
- In general, maintain the system so it is free of any condition hazardous to public health.

2) For Septic Systems, Alternative Systems, or Experimental Systems

- Retain the effluent within the wastewater system and not allow discharge onto the surface of the ground, into the waters of the state, or into any ditch or water course;
- Keep the system free of habitat which favors vector breeding;
- Avoid wastewater other than domestic wastewater such as shop and garage floor drains with oils and greases;
- Adequately limit vegetation growth on, in, or around the private wastewater system;
- Avoid using garbage disposal;
- Avoid building, parking or driving on or over lateral lines;
- Pump every 3 to 5 years;

- In general, maintain the system so it is free of any condition hazardous to public health.

2-6.13 Permit Required for All Wastewater Systems

Any sewage system installed in Lyon County which is not required to have a permit from the Kansas Department of Health and Environment must be permitted by the Administrative Agency.

2-6.14 System Design.

The Administrative Agency has the option to require private wastewater treatment systems to be designed by an engineer licensed by the State of Kansas.

2-6.15 Compliance with Minimum State Standards Required.

All private wastewater systems must be installed and operated to meet or exceed minimum Kansas standards for design and construction as set forth in the most recent edition of Bulletin 4-2, *Minimum Standards for Design and Construction of Onsite Wastewater Systems*; Kansas State University's most recent edition of *Wastewater Pond Design and Construction*; Kansas State University's most recent edition of *Wastewater Pond Operation, Maintenance, and Repair*; or other references as published or approved by the Kansas Department of Health and Environment. In some circumstances, size may be an issue that needs or requires a special system design.

2-7.0 MINIMUM STANDARDS FOR SOIL TOPOGRAPHY AND GEOLOGY

No private wastewater system shall be constructed on any lot of any size unless minimum standards for percolation rates, soil profiles, and depth to impervious rock or groundwater are met. If minimum standards are not met, approved liners may be allowed. (See Section 2-7.4 for Waivers) Due to potential future costs, it is strongly recommended that a second site also be reserved for a future replacement system.

Refer to Appendix B.

2-7.1 Minimum Standards for Private Wastewater Systems which Remove Wastewater Primarily Through Absorption into the Soil.

Systems which remove wastewater primarily through absorption into the soil must meet the following minimum requirements:

- 1) the percolation rate of undisturbed soil must be between one (1) inch of water per five (5) minutes and one (1) inch of water per sixty (60) minutes.
- 2) the vertical separation distance must be no less than four (4) feet between the level of maximum elevation of groundwater and the point at which the soil/wastewater interface occurs.
- 3) the vertical separation distance must be no less than four (4) feet between the level of maximum elevation of: impervious clay and rock formations; fractured bedrock; and, gravel beds and the point at which the soil/wastewater interface occurs.

2-7.2 Minimum Standards for Private Wastewater Systems which Remove Wastewater Primarily Through Evaporation into the Air.

Systems which remove wastewater primarily through evaporation into the air must meet the following minimum requirements:

- 1) the percolation rate of undisturbed soil must be slower than (1) inch of water per sixty (60) minutes.
- 2) the vertical separation distance must be no less than four (4) feet between the level of maximum elevation of groundwater and the point at which the soil/wastewater interface occurs.
- 3) the vertical separation distance must be no less than four (4) feet between the levels of maximum elevation of: rock formations; fractured bedrock; and, gravel beds and the point at which the soil/wastewater interface occurs.
- 4) systems constructed in soils which are listed as having restrictions due to seepage by the 1981 Lyon County Soil Survey or subsequently

determined to be likely to seep and those determined by the Director of Environmental Health to have the potential to seep must be lined and/or meet compaction requirements. Acceptable lining materials and/or compaction will be determined by the Administrative Agency. Such decision will be guided by recommendations established by the Kansas Department of Health and Environment. See Section 2-6.15

2-7.3 Soil Testing.

The following soil tests must be performed prior to installation of a private wastewater system:

- 1) soil profile
- 2) percolation test
- 3) other tests as may be deemed necessary by the Administrative Agency to determine the type of system to be recommended and the proper location for the system.

Such tests must be made by or in the presence of a representative of the Administrative Agency.

2-7.4 Waiver of Soil Testing Requirements.

In no case shall a soil profile be waived prior to installation of a private wastewater system. The soil percolation test may be waived if in the professional judgment of the Administrative Agency such a test would not substantially add to the knowledge of the soils at the site.

2-7.5 Fencing Required.

Fencing is required around all private wastewater stabilization ponds or lagoons. Reference Kansas State University's most recent edition of *Wastewater Pond Design and Construction*; Kansas State University's most recent edition of *Wastewater Pond Operation , Maintenance, and Repair*; or other references as

published or approved by the Kansas Department of Health and Environment.

The Administrative Agency must maintain a policy for fencing and fencing approval.

2-8.0 REQUIREMENTS FOR SANITARY PRIVIES AND WATERLESS SEWAGE SYSTEMS

2-8.1 Approval of Plans.

Any person who plans to construct, erect, alter, modify, or use any sanitary privy or waterless sewage system shall have the plans and specifications for the proposed construction and/or modification approved by the Administrative Agency.

2-8.2 Approval of Construction.

A newly constructed or modified sanitary privy or waterless sewage system must be inspected and found to be in conformity with approved design standards by the Administrative Agency before it can be used or made available for use.

2-8.3 Proper Maintenance.

A sanitary privy or waterless sewage system must be in a clean sanitary condition before being used or offered for use. Privies and waterless sewage systems must not permit insects or rodents access to the fecal material in the pit. Any sanitary privy or waterless sewage system found to be in violation of this code must be condemned for further use unless cleaned and sanitized or repaired within a reasonable time as determined by the Administrative Agency. The Administrative Agency must order in writing the proper abandonment of any system that is not maintained according to this code.

2-8.4 Vault Required.

Privies or waterless sewage systems which collect sewage shall be constructed with a watertight vault in lieu of the standard pit. The vault of the sanitary privy must be constructed of concrete.

2-8.5 Location of Sanitary Privies.

The following restriction must be observed in sanitary privies using the concrete vault.

- 1) A sanitary privy shall be installed more than one hundred (100) feet from an existing well.
- 2) A sanitary privy shall not be constructed or reconstructed on any premise served by a public water supply, or on which water is provided to the home under pressure, unless special permission for use of a sanitary privy is obtained from the Administrative Agency.

2-9.0 ALTERNATIVE AND EXPERIMENTAL WASTEWATER SYSTEMS

2-9.1 Permits Required.

Alternative or experimental wastewater systems shall follow the same permitting procedure as documented in Section 2-6.0 of this code.

2-9.2 Standards for Design and Construction.

System design, construction, and soil requirements must follow standards as may be established by the Kansas Department of Health and Environment and shall be consistent with the Lyon County Sanitation/Environmental Code.

2-9.3 Experimental System Allowed.

Experimental systems may be allowed if sufficient documentation is provided to the Administrative Agency indicating that such systems have a reasonable chance of operating successfully and will not create a health hazard or pollute the waters of the State of Kansas. The owner of such system must agree in writing that if failure occurs the system will be replaced at the owner's expense with a system of acceptable design as determined by the Administrative Agency.

2-9.4 Maintenance Contract Required.

An annual maintenance contract is required for all alternative and experimental wastewater systems with mechanical and/or electronic components. The

contract shall require the maintenance company to provide the Administrative Agency with written reports of inspections and any maintenance performed on the system within one month of that service. Major repairs must follow the requirements set out in Section 2-6.0. The contract shall also require the company to notify the Administrative Agency within two (2) weeks of cancellation or non-renewal of the contract.

2-10. REQUIREMENTS FOR PUBLIC SEWERAGE SYSTEMS

2-10.1 Approval of Plans and Specifications by the Kansas Department of Health and Environment.

Public Wastewater Treatment Systems must be approved by KDHE.

2-10.2 Review of Plans by the Administrative Agency.

The Administrative Agency shall also have the right to review plans and specifications for public sewerage systems. A copy of all plans and specifications must be submitted to the Administrative Agency for review prior to starting construction of such systems.

2-10.3 Permit.

The owner of every public wastewater system must obtain a permit for operation of the system from the Kansas Department of Health and Environment, and no public wastewater system shall be operated or put in operation until the owner has obtained the required permit.

2-10.4 Responsibility for Operation.

Responsibility for operation of all public wastewater systems must be vested in:

- 1) a sewer district, improvement district or similar public agency authorized to operate public wastewater systems, or
- 2) a nonprofit corporation incorporated under Kansas laws and authorized by Charter and by-laws to operate and maintain the public wastewater

system until such time as the responsibility is transferred to a duly constituted public agency.

2-11.0 SANITARY SERVICES

2-11.1 License Required.

No person shall in any way move, haul or transport any wastes for another person unless the operator providing the service holds a valid license from the Administrative Agency. Examples of such wastes include but are not limited to:

- Waste which is not discharged into a publicly-owned sanitary sewer or municipal wastewater treatment plant, and which originates from any commercial, industrial or manufacturing operation.
- Any waste from any holding site or private wastewater system including any sanitary privy, waterless sewage system, holding tank or other storage site.
- Any domestic sewage.
- Any human excreta.

EXCEPTION: Landowners may pump and apply septage generated on their own property to their own land without obtaining a license. Land application of septage shall follow Title 40, Part 503 Code of Federal Regulations and separation distances as defined in Section 2-11.5.1 1) of this code.

2-11.2 Application and Inspection Fee Renewable Annually.

Every person wishing to obtain a sanitary service license must make application for a license on forms provided for this purpose. All sanitary service licenses must be renewed annually.

2-11.3 Contracting with Unlicensed Persons Prohibited.

No person responsible for operating a private wastewater system, including any lagoon, septic tank/absorption field system, sanitary privy, waterless sewage system, alternative wastewater system, or experimental system shall contract, or

offer to contract, with any person for sanitary service unless that person holds a valid license to provide such service from the Administrative Agency. No person shall accept delivery nor allow application to land of any waste originating from a private wastewater system, commercial, manufacturing, or industrial processes unless the person hauling that waste holds a valid license from the Administrative Agency.

2-11.4 Minimum Standards for Sanitary Service Equipment.

To insure that all materials removed will be transported to the designated point of disposal for treatment without spillage of the waste onto the road or street, all equipment used for rendering of sanitary services must meet all of the following:

- 1) identify each vehicle to be used for such service with six (6) inch lettering;
- 2) be of water tight construction;
- 3) be maintained in good working condition;
- 4) be provided with hoses, couplings, valves, pumps and other equipment as may be necessary to prevent leakage and spillage;
- 5) the operator must demonstrate that all equipment is in good operating condition and will perform its function without leakage or spillage.

2-11.5 Requirements for the Disposal of Domestic Septage.

The Administrative Agency will utilize Title 40, Part 503 of the Code of Federal Regulations; Sewage Sludge Use and Disposal, as guidelines for proper disposal by land application of domestic septage. The Administrative Agency shall utilize the requirements established in 2-11.5.2 for situations in which the septage hauler does not land apply septage.

2-11.5.1 Requirements for Disposal of Domestic Septage by Land Application

- 1) All licensees who dispose of domestic septage by land application must comply with the following criteria:

- The site must be inspected and approved by the Administrative Agency. If disposal is done on land outside the county boundary, the Administrative Agency in that county or state must provide written approval to the Director of Environmental Health as evidence of a satisfactory disposal site.
 - Septage may be applied to farm ground owned by the person that generated the sewage.
 - Application of domestic septage must not exceed 30,000 gallons per acre per year.
 - Septage must not be applied within 500 feet of a public or private water supply well.
 - Septage must not be applied within a 100-year flood plain.
 - Septage must not be applied to any surface, such as frozen, snow covered or saturated soil, if run-off to the waters of the state is likely to occur.
 - Septage must not be applied to any surface where drainage run-off is likely to occur under normal circumstances.
 - Septage must not be applied within two hundred (200) feet of a drainage course or water resource as illustrated in the 1981 Lyon County Soil Survey.
- 2) Licensee must maintain disposal logs on every load and submit a copy of the same to the Administrative Agency on a monthly basis. Disposal log must contain the following information:
- Date of disposal
 - Name and address of generator
 - Disposal Site by location (legal description)
 - Owner of site on which disposal is conducted

- Number of acres available at disposal site
 - Volume of septage collected
 - Volume of septage disposed
- 3) The licensee must maintain records on all soil testing required under Title 40, Part 503. Such records must be made available to the Administrative Agency on request. The Administrative Agency may collect or require to be collected by the licensee soil samples to be submitted by the Administrative Agency to the laboratory of the licensee's choice. Fees for such testing must be paid by the licensee.
- 4) The licensee must maintain records which comply with all record keeping requirements established under Title 40, Part 503 of the Code of Federal Regulations. Such records must be made available for inspection by the Administrative Agency on request.

2-11.5.2 Requirements for the Disposal of Domestic Septage at a Publicly Owned Treatment Works (POTW) Facility

- 1) All licensees who dispose of domestic septage at a Kansas Department of Health and Environment licensed public wastewater treatment facility must comply with all requirements established by that facility for the discharge of domestic septage into the facility.
- 2) Licensee must maintain disposal logs on every load and submit a copy of the same to the Administrative Agency on a monthly basis. Disposal log must contain the following information:
- Date of disposal
 - Name and address of generator
 - Disposal Site by address
 - Name of facility at which disposal is conducted

- Volume of septage collected
- Volume of septage disposed

2-11.6 Prohibited Disposal Practices.

- 1) Industrial discharges to systems not regulated by the Kansas Department of Health and Environment are prohibited.
- 2) Liquid wastes such as sand trap wastes, waste or used oil, and hazardous wastes as defined by the Resource Conservation and Recovery Act are not domestic septage and must be disposed of according to relevant Kansas Department of Health and Environment statutes and regulations.
- 3) Domestic septage is not to be disposed of in any private lagoon system.

2-11.7 Penalties for Non-Compliance with Section 2-11.6.

Any sanitary service operator will be subject to license suspension or termination by the Administrative Agency if it is determined, upon hearing and written notice, that the licensee violated the requirements of Section 2-11.6. The sanitary service operator will also be subject to such other penalties and remedies provided for violations of this Sanitation/Environmental Code in Chapter 1 of the Administrative Code.

2-12.0 LICENSURE OF CONTRACTORS, INSTALLERS, DESIGNERS, AND EVALUATORS

2-12.1 License Required.

No person except the owner shall construct or modify any private wastewater treatment system unless that person holds a valid license issued by the Administrative Agency. Issuance of a license is contingent upon satisfactory completion of training provided or approved by the Administrative Agency.

2-12.2 Contracting with Unlicensed Wastewater Treatment System Installers Prohibited.

No person responsible for operating a private wastewater treatment system shall contract with any person for evaluation, construction or modification of a private wastewater treatment system, unless that installer holds a valid license.

2-12.3 Exemptions from License Requirement.

The following operations shall not require a license:

- 1) Installation of pipe from the house to a wastewater stabilization pond.
- 2) Fencing a wastewater stabilization pond.
- 3) Seeding the berm of a wastewater stabilization pond.

2-13.0 REQUIREMENTS FOR SUBDIVISION DEVELOPMENT

2-13.1 Approval of Administrative Agency Required.

After adoption of this code no person shall be able to obtain an approval to build on any lot of any subdivision until the plans and specifications for onsite wastewater management have been approved by the Administrative Agency. No county planning or zoning board, authorized to review and recommend approval of plats or subdivisions of land, shall recommend for approval any plat containing one or more building sites on less than six and two-thirds ($6 \frac{2}{3}$) acres unless the plans have been reviewed and approved by the Administrative Agency.

2-13.2 Required Plot or Lot size.

No plat or subdivision of land shall be approved containing one building site having less than six and two-thirds ($6 \frac{2}{3}$) acres of land, unless public sewers are provided, or a surety bond in an amount to be determined by the County Commissioners is filed with the county clerk to guarantee the installation of such sewers, or acceptable private wastewater systems can be installed as determined by the Administrative Agency. In no case may lot size be reduced below three (3) acres. In all cases an adequate water supply must be available and approved by the Administrative Agency prior to approval of the site for a

wastewater treatment system. In addition, adequate reserve area must be available for future replacement systems.

2-13.3 Compliance with Zoning and Land Use Regulations.

The Administrative Agency shall not approve plans or authorize construction of any wastewater system in an area where zoning regulations prohibit such facilities.

2-14.0 NOTIFICATION OF PLANNING AND ZONING BOARDS AND RURAL WATER DISTRICTS

2-14.1 Notification of Planning and Zoning Boards, Watershed Districts and Rural Water Districts Required.

Upon receipt of an application for installation of any sewage system, public or private, the Administrative Agency shall notify any and all planning and zoning boards, watershed districts and rural water districts serving the area in which the system will be located.

2-14.2 Approval by Planning and Zoning Boards Required.

No permit for any sewerage system or wastewater system shall be issued by the Administrative Agency until notice of compliance with planning and zoning ordinances is received from the respective agency.

2-15.0 ABANDONMENT OF SEWAGE SYSTEMS

2-15.1 Removal Required.

Any sewage system which has not been used for a period of ten (10) years or any sewage system which is replaced by a new system must be properly abandoned. Proper abandonment shall mean the following:

- 1) Septic Tanks, Holding Tanks, Vaults, and Sanitary Privies must:

- have all sludge removed and disposed of in a manner consistent with EPA 503 Regulations (information available from the Administrative Agency); and
 - be removed from the ground and the excavation filled with compacted soil; or,
 - be disconnected from the sewer pipes, the bottom broken, and the tank filled with gravel or sand.
- 2) Wastewater Stabilization Ponds which:
- contain over 18 inches of sludge shall have all sludge removed and disposed of in a manner consistent with EPA 503 Regulations.
 - contain 18 inches of sludge or less may be backfilled with compacted earth.
- 3) Specific procedures for abandonment of septic tanks, holding tanks, and wastewater stabilization ponds shall be established by the Administrative Agency.
- 4) Proper procedures for abandonment of any other private wastewater system shall be established and enforced as necessary by the Administrative Agency.

2-16.0 RECIPROCITY

When it is determined to the satisfaction of the Director of Environmental Health that it is in the best interest of Lyon County and the quality of inspection and regulation will not be diminished, required licenses may be reciprocated with other Kansas counties.

2-17.0 VARIANCE

The Administrative Agency shall have the authority to grant exceptions when reliable written data is provided which can justify the exception and which will still protect the

quality of the waters of the state and not create a nuisance as defined in Section 1-4.10. Such information must be noted on the permit.

2-18.0 PREVIOUSLY CONSTRUCTED SEWAGE SYSTEMS

Existing systems which do not meet the standards of this code shall not be required to come into compliance and/or septic systems shall not be required to be pumped unless such system is in failure as determined by the Administrative Agency. In this case, failure shall be defined as:

- 1) Surface discharge of sewage
- 2) Seepage of incompletely treated sewage from any private wastewater system
- 3) Unfenced or fenced lagoons that do not restrict access by children, toys, pets and/or livestock
- 4) Any system that is determined to be a hazard to the health of humans, pets or livestock or other condition determined by the Administrative Agency to be a health hazard.

All repairs and new construction must be in compliance with this code.

This resolution is adopted by the Board of County Commissioners of Lyon County, Kansas this _____th day of _____, 2004.

Chairperson, Lyon County Commission

Member, Lyon County Commission

Member, Lyon County Commission