ENVIRONMENTAL/SANITARY CODES

OF

DONIPHAN COUNTY, KANSAS

DONIPHAN COUNTY HEALTH DEPART./HOME HEALTH

TROY, KANSAS

EFFECTIVE DATE
MARCH 1, 1997

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ENVIRONMENTAL/SANITARY CODE
OF
DONIPHAN COUNTY, KANSAS
Chapter 1

ADMINISTRATIVE PROCEDURES

SECTION 1-1.0

AUTHORITY AND POLICY

1-1.1 LEGAL AUTHORITY. This code is adopted under the authority granted to the Board of County Commissioners by K.S.A. 19-3701 through 19-3708 as amended. This code shall be enforced pursuant to authority granted unto the Board of County Commissioners, or the duly constituted governing body of Doniphan County, Kansas. Nothing herein is intended to nor constitutes a pre-emption of similar authority conferred separately enforcing the Water Well Construction Act, K.S.A. 82a-1201, et seq.

1-1.2 DECLARATION OF FINDING AND POLICY. The County Commissioners find that provisions for adequate and reasonable control over the environmental conditions in unincorporated areas of the county are necessary to adopt a sanitation code to (1) eliminate and prevent the development of environmental conditions that are hazardous to health and safety, and (2) promote the economical and orderly development of the land and water resource of the county. For these reasons and objectives, it will be the policy of the Board of county commissioners to amend this code from time to time with respect to any matter affecting environmental sanitation and safety.

1-1.3 PURPOSE. The purpose and intent of this code is (1) to prescribe the administrative procedures to be followed in administering this code any amendment thereto; (2) to prescribe rules and regulations for controlling practices to minimize health and safety hazards in our environment; (3) to establish administrative procedures to facilitate fair and equitable regulation while recognizing the rights of affected persons to receive reasonable prompt processing and to appeal administrative decisions.

1-1.4 TITLE. This code shall be known and referred to as the Doniphan County Environmental/Sanitary Code, hereafter referred to as the "code".

1-1.5 APPLICABILITY. The administrative procedures prescribed in this chapter shall be followed in administering this code and any amendments thereto.

1-1.6 EFFECTIVE DATE. This code shall become effective on and after its adoption by county resolution and only applies to new systems and systems that are not properly functioning.

SECTION 1-2.0 DEFINITIONS

The following words and phrases, when used in this code, shall have the meanings ascribed to them in this section, unless indicated otherwise.

1-2.1 ADMINISTRATIVE AGENCY. The entity or entities authorized to implement and enforce the provisions of this code.

1-2.1.1 The Administrative Agency for Doniphan County is designated as the Doniphan County Health Department/Home Health Agency.

1-2.2 ADMINISTRATIVE RULES. Those rules and regulations contained in Chapter 1 of this code which prescribe general procedures to be followed in the administration of the code adopted by the county.

1-2.3 AGRICULTURE PURPOSE. For the purposes of this code "agricultural purposes" means a purpose related to the production of livestock or crops (K.S.A. 19-3706).

1-2.4 AUTHORIZED REPRESENTATIVE. Any person who is designated by the Administrative Agency to administer this code.

1-2.5 BOARD OF COUNTY COMMISSIONERS. Means the Board of County Commissioner of Doniphan County, Kansas.

1-2.6 BOARD OF HEALTH. Means the Doniphan County Board of Health (K.S.A. 65-201).

1-2.7 DOMESTIC WASTE WATER(Sewage) - Means all water borne wastes produced at family dwellings in connection with ordinary family living, and similar type waste water produced at offices, churches, schools, industrial and commercial firms, exclusive of storm water, foundation drains and cooling water.

1-2.8 DWELLING UNIT. Any building or structure occupied by a human being either a full time or part time basis.

1-2.9 ENVIRONMENTAL/SANITARY CODE. Procedures, standards, and regulations adopted by the county designed to minimize or control those environments and environmental conditions

may include, but are not restricted to: waste water and waste water disposal; water supply; nuisance; food and food handling. Whenever the term "code" is used herein, such reference shall be to the Environmental/Sanitary Code of Doniphan County, Kansas.

1-2.10 HEALTH OFFICER. The legally appointed Health Officer of Doniphan County or his/her duly authorized representative.

1-2.11 HEARING OFFICER. Means any person designated by the County Commissioners to hear appeals from decisions of the Administrative Agency relating to the enforcement and administration of this code and other environmental/sanitary codes.

1-2.12 PERSON. Any municipality, political subdivision, institution, corporation, partnership, association or individual.

1-2.13 PERMIT/LICENSE. A document to grant permission; to authorize or to consent to an action.

1-2.14 PREMISES. Any one or more lots of land or tracts of land, including all buildings, structures, or facilities located thereon.

SECTION 1-3.0 ADMINISTRATIVE POWERS AND PROCEDURES

1-3.1 RIGHT OF ENTRY. Representatives of the Administrative Agency and/or its designees shall have the right to enter upon private property to inspect, to examine, and/or to survey for any purpose reasonably related to enforcement of this code.

1-3.2 OBSTRUCTION OF ADMINISTRATIVE AGENCY. No person shall willfully and knowingly impede or obstruct representatives of the Administrative Agency in the discharge of official duties under the provisions of this code. Any representative denied access to any premises for the purpose authorized in this code shall have authority to seek such injunctive or other legal or equitable relief from the District Court as is necessary to ensue access and compliance of this code.

1-3.3 PERMIT AND LICENSE.

1-3.3.1 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 Administrative Agency on standard forms provided for that purpose.

1-3.3.2 ISSUANCE OF PERMIT OR LICENSE. Within ten (10) working

days after the receipt of an application for a permit or license required by this code, the Administrative Agency shall begin such investigations and inspections as necessary to determine whether the permit or license should be issued or denied, and shall issue or deny the permit or license within thirty (30) days. If the permit or license is denied, the Administrative Agency shall send the applicant a written notice with the reasons for rejection stated thereon.

1-3.3.3 PERMIT NON-TRANSFERABLE. No permit or license shall be transferable, nor shall any fees required and paid therefore be refunded.

1-3.3.4 STANDARD FEES. For the purpose of defraying all or part of the costs of administration of this code, the Board of County Commissioners shall establish a schedule of fees for all permits and licenses required by the code, payable upon submission of application of such permit or license. Said fees shall be paid to the Administrative Agency and a receipt issued.

1-3.4 NOTICES, ORDERS, APPEALS

1-3.4.1 NOTICE OF VIOLATIONS. Whenever the Administrative Agency determines that there has been or is likely to be a violation of any provision of this code, the administrative Agency shall (1) visit or discuss said violation with occupant/owner; (2) give notice in writing; (3) identify the code violation and the factual basis thereof; (4) specify necessary corrective action; (5) specify a reasonable period of time for performance of any corrective action and/or work required by the notice. Such notice shall be deemed properly served upon the occupant or owner of the premises when a copy thereof has been sent by registered mail to the last known address of the owner or occupant as identified on the latest county tax rolls.

1-3.4.2 APPEAL FOR HEARING. (Unless stated violation is against a Kansas State Statute, wherein it is the duty of the County Attorney to prosecute said violation.) Any person aggrieved by any notice or order issued by the Administrative Agency under the provisions of this code shall be entitled to a hearing on the matter before a Hearing Officer provided such person shall have filed with the Administrative Agency within ten (10) working days after the date of issuance of the notice or order a written petition requesting a hearing and setting for the the grounds upon which the objection is made. The filing of the request for hearing shall operate as a stay of the notice or order, except as provided in paragraph 1-3.4.4 to follow. Upon receipt of such petition the Administrative Agency shall confer with the Hearing and shall give the petitioner seven (7) days written notice

thereof. Upon request of the petitioner and for good cause shown, the Hearing Officer may continue the hearing from its original setting.

1-3.4.3 REPORT OF HEARING. Within ten (10) working days after the hearing, the Hearing Officer shall submit a written report of his finding to the County Commissioners with a recommendation. Upon receipt of the report of the Hearing Officer, the County Commissioners shall consider the report and issue an order confirming, modifying or withdrawing the notice or order of the Administrative Agency. The appellant shall be notified in the same manner as is provided for in Section 1-3.4.1. Any appeal from a finding and determination of the County Commissioners shall be to the District Court.

1-3.4.4 EMERGENCY ORDERS. Whenever the Administrative Agency finds that an emergency exists which requires immediate action to protect the public health, the Administrative Agency, without notice of hearing, will issue an order reciting the existence of such an emergency and require that such action be taken to meet the emergency, including the suspension of the permit. Notwithstanding any other provision of this code, such order shall be effective immediately and shall be enforceable in Doniphan County District Court.

1-3.5 RECORDS.

1-3.5.1 PERMIT APPLICATIONS. Applications for permits or licenses required by this code shall be filed with the Administrative Agency.

1-3.5.2 OFFICIAL ACTIONS. A written record of all official actions taken on applications for permits and licenses required by this environmental code shall be kept on file with the Administrative Agency.

1-3.5.3 PROCEEDINGS OF HEARINGS. The proceedings of all hearings, including findings and decisions of the Hearing Officer, and a copy of every notice and order related there to shall be filed with the Administrative Agency. Transcripts of the proceedings of hearings need not be transcribed unless a judicial review of the decision is sought.

1-3.6 DISCLAIMER OF LIABILITY. This code and other environmental/health codes adopted shall not be construed or interpreted as imposing upon the county, its officials, or employees (1) any liability or responsibility for damages to any property, or (2) any warranty that any system, installation or portion thereof that is constructed or repaired under permits and inspections required by code will function properly.

1-3.7 SEPARABILITY. If any clause, sentence, paragraph, section or subsection of this code shall for any reason be adjudged by any court of competent jurisdiction to be unconstitutional and invalid, such judgement shall not affect, repeal or invalidate the remainder thereof, but shall be confined to the claus, sentence, paragraph, section or subsection thereof so found unconstitutional and invalid. (K.S.A. 19-3708).

1-3.8 PENALTIES AND ENFORCEMENT PROCEDURES.

1-3.8.1 ENFORCEMENT PROCEDURE. The County Attorney shall enforce the provisions of this code and other environmental codes adopted by the county and is hereby authorized and directed to file appropriate actions for such enforcement upon request of the Administrative Agency. 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 Procedures.

1-3.8.2 PENALTIES. In addition to, and independently of, the enforcement procedures provided in Section 1-3.8.1 herein, any violation of any provision of environmental/sanitary code shall be deemed to be an unclassified misdemeanor and punishable by a fine not to exceed two-hundred dollars ($200) for each offense. Each day's violation shall constitute a separate offense.

ENVIRONMENTAL/HEALTH CODE
OF
DONIPHAN COUNTY, KANSAS
Chapter 2

WASTE WATER AND DISPOSAL

SECTION 2-1.0 Purpose and Intent of Code. The provisions of the chapter are adopted for the purpose of regulating the location, construction, maintenance, and use of septic systems, alternate waste water systems, privies, and the removal and disposal of materials from such facilities in order to protect the health of the citizens and the environment of Doniphan County.

SECTION 2-2.0 Applicability. Pursuant to K.S.A. 19-3706, the provisions of this chapter shall apply to all unincorporated land located in Doniphan County.

SECTION 2-3.0 Definitions. The following definitions shall apply in the interpretation and enforcement of this regulation.

2-3.1 ABSORPTION BED. The term "absorption bed" means a pit or hole in which gravel is placed with a depth not greater than 6 feet and with a separation of at least 4 feet above a water table.

2-3.2 ABSORPTION FIELD. The term "absorption field" means a configuration of on-site trenches installed to absorb sewage effluent from a septic tank or other sewage solids removal devices.

2-3.3 ABSORPTION TRENCH. The term "absorption trench" means a trench in which perforated drain pipe is laid to convey and distribute septic tank effluent.

2-3.4 ALTERNATIVE ON-SITE SEWAGE/WASTE WATER MANAGEMENT SYSTEM. The term "alternative on-site sewage management system" means any on-site sewage management system which has proven reliability and performance in field use, but which differs in design or operation from approved conventional septic tank and absorption-field systems.

2-3.5 APPROVAL AND APPROVED. The terms "approval" and "approved" means accepted or acceptable by the Administrative Agency in accordance with applicable specifications stated herein or with additional criteria accepted by the Department.

2-3.6 AVAILABLE SEWER. Any public sewer within 200 feet of a building that is feasible for connection.

2-3.7 BUILDABLE SPACE. The entire area of the lot, tract or parcel on which an individual septic tank or other on site sewage management system is to be located, exclusive of space required to meet minimum distances from existing structures, easements, established road right-of-way, utility right-of-way and any other recognized right-of-way that might have impact on available space.

2-3.8 BUILDING SEWER. The term "building sewer" means that part of the piping of a drainage system beyond the building which receives and conveys liquid wastes to a public sewer, private sewer, on-site sewage management systems or other disposal.

2-3.9 DISTANCES. Means horizontal distance unless otherwise designated. Measurements referred to as "not less than", "minimum", "at least" and other similar designations shall mean horizontal distances unless specifically indicated otherwise.

2-3.10 DISTRIBUTION BOX. The term "distribution box" means a water tight structure which receives sewage from a septic tank or other sewage retention device and equally distributes it to two or more absorption trenches.

2-3.11 DOMESTIC WASTE WATER (Sewage). Means all water borne wastes produced by family dwellings in connection with ordinary family living, and similar type waste water produced at offices, churches, industrial and commercial firms, exclusive of storm water, foundation drains and cooling water.

2-3.12 EXPERIMENTAL OR INNOVATIVE On-site MANAGEMENT SYSTEM. The term "experimental or innovative on-site sewage management system" means any on-site sewage management system installed for testing and observation.

2-3.13 GRADE. The term "grade" means the ratio of vertical drop of pipe invert, trench bottom, or ground surface to the horizontal distance transversed.

2-3.14 GREASE TRAP. The term "grease trap" means a device in which the grease content of sewage is intercepted and congealed and from which the grease may be removed for proper disposal.

2-3.15 GRIT TRAP. The term "grit trap" means a device in which the grit content of sewage is intercepted and held before being removed for proper disposal.

2-3.16 HEALTH AUTHORITY. The term "health authority" means the Doniphan County Health Officer or his/her authorized representative.

2-3.17 HEALTH DEPARTMENT. The term "health department" means

the Administrative Agency.

2-3.18 INDUSTRIAL AND COMMERCIAL WASTE WATER. (Sewage). Means any other liquid or water-borne wastes produced in connection with any industrial or commercial process or operation, other than domestic wastes.

2-3.19 KDH&E. Means the Kansas Department of Health and Environment.

2-3.20 LAGOON OR SEWAGE LAGOON. The term "lagoon" shall mean an artificial pond designed to exclude surface water and receive raw sewage through a submerged sewer for biological decomposition.

2-3.21 LOT. The term "lot" means the smallest basic portion of a subdivision or other tract of land, normally intended to be developed and transferred individually.

2-3.22 LATERAL ROCK. The term "lateral rock" means washed gravel or washed crushed stone ranging in size from three-quarter inch (3/4") to one and one-half inch (1 1/2").

2-3.23 On-site SEWAGE MANAGEMENT SYSTEM. The term "on-site sewage management system" means a system that includes a septic tank, absorption field and all other elements intended to be used for management and disposal of sewage on-site. A septic tank- lateral system is an on-site sewage management system.

2-3.24 PACKAGE PLANT. The term "package plant" means an approved water tight structure installed underground to receive, agitate and aerate sewage from a building sewer, effecting separation and organic decomposition of sewage solids and discharging effluent to an absorption field.

2-3.25 PRIVATE WATER SUPPLY. The term "private water supply" means a water system serving a single family residence and not ordinarily available to the public.

2-3.26 PRIVY. A facility designed and/or used for the disposal of human excreta.

2-3.27 PUBLIC WATER SUPPLY. The term "public water supply" means any water system other than a private water supply.

2-3.28 PUBLIC OR COMMUNITY SEWERAGE/WASTE WATER SYSTEM (Sewer District). The term "public or community sewerage system" means any sewage collection, treatment and disposal system, including sewers, treatment plants, pumping stations, force mains and all other elements owned, operated or managed by a public entity (including agents thereof) and serving more than one residential premise.

2-3.29 REGULATORY FLOOD. The term "regulatory flood" means the flood having a one percent chance of being equalled or exceeded in any given year.

2-3.30 REGULATORY FLOODWAY. (Flood plain) The term "regulatory floodway" means an area designated by the Federal Insurance Administration which shall include the channel of a river or other water course and the adjacent land areas that must be reserved in order to discharge the regulatory flood without cumulatively increasing the water surface elevation of more that one foot on the adjacent land.

2-3.31 SANITARY SERVICE. The term "sanitary service" means the pumping out and/or removal of wastes, sludge or human excreta from privies, septic systems or alternative waste water systems, and the transportation of such material to a point of final disposal.

2-3.32 SEPTIC TANK. The term "septic tank" means an approved water tight structure installed underground to receive sewage from a building sewer, effecting separation and organic decomposition of sewage solids and discharging effluent to an absorption field.

2-3.33 SUBDIVISION. The term "subdivision" means any tract of land that is or has been subdivided into two or more lots for the purpose of sale 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 of lots.

2-3.34 TOILET. The term "toilet" means a sanitary fixture meeting Health Department and plumbing code requirements for receipt and conveyance of human body wastes.

2-3.35 TRACT. Means a wide expanse of land without precise boundaries.

2-3.36 WELL. Means an excavation or opening into the ground by which ground water is sought or obtained.

SECTION 2-4.0 Environmental/Sanitary Services Prohibited Practices

2-4.1 USE OF NON-APPROVED WASTE WATER SYSTEMS. No person shall use, sell, lease, or rent for use any septic system, alternative waste water system, or privy that:

a. Has been constructed after March 1, 1997 and until it has been inspected and approved by the Administrative Agency;

b. Has been temporarily or permanently enjoined as a public health nuisance by a court of competent jurisdiction;

c. Fails to comply with the provisions of this environmental/sanitary code, and written notice thereof has been given by the Administrative Agency to the owner or responsible person;

d. Discharges inadequately treated wastes onto the surface of the ground, into watercourses, lakes, ponds or any impoundment; or

e. Causes fly breeding, produces offensive odors or any other condition that is prejudicial to health and comfort.

2-4.2 DISPOSAL OF SEWAGE

a. No one may dispose of human waste except in an approved toilet or approved privy. Flush toilets must be connected to a public sewer or an approved on-site sewage management system. Privies must meet requirements of the Administrative Agency as to design and installation in lieu of a flush toilet and must be specifically approved by the Agency.

b. All sink, lavatories, garbage disposals, dishwashers, clothes washing machines, shower baths, bathtubs, basins and similar plumbing fixtures or appliances shall be connected to a public sewer or to an approved on-site sewage management system.

c. Foundation drain water, swimming pool water, non-domestic waste water or surface water MUST NOT GO INTO the septic tank or on-site sewage management system.

d. No household, industrial or commercial wastes shall be discharged into any watercourse, impoundment, storm sewer or public thoroughfare. The discharge of sewage into seepage pits, abandoned wells, cisterns, streams or upon the surface of the ground shall be prohibited. In no case shall treated or untreated sewage, or the effluent from a septic tank or on-site sewage management system be permitted to drain directly or indirectly in to a ditch or stream, nor shall it be allowed to surface or run or drain across any adjacent land owner.

e. In the event that a failure of an on-site sewage management system occurs and it is determined by

the Health Department that the system cannot be repaired, then either connection to a public sanitary sewer shall be made or a new approved on site sewage management system shall be installed.

f. Where no sewer is available or where standard on site sewage management is not possible, innovative/alternative systems may be considered for approval by the Administrative Agency provided that purpose of this code would not be compromised by the use of such systems.

g. On-site sewage management systems shall be maintained in sanitary condition by regular maintenance and/or repair.

2-4.3 TOILETS

a. All dwellings, shops, schools, or other buildings used as a home or meeting place for humans shall be provided with either an approved toilet or an approved privy in accordance with the provisions of this regulation. Privies shall not be permitted if public sanitary sewer is available or an on-site sewage management system can be approved.

b. Every flush toilet shall be connected to a public sewer or to an approved on-site sewage management system.

c. Flush toilets shall at all times be provided with sufficient water and pressure to provide adequate flushing.

2-4.4 CONNECTION TO NON-APPROVED PUBLIC WASTE WATER SYSTEM. No premises shall be permitted to connect to any public waste water system that does not hold a valid permit from the KDH&E as required in 2-5.1.

2-4.5 CONNECTION TO SEWER.

a. The owner, lessee or agent thereof of any building, residence or other facility designed or used for human occupancy or congregation, shall provide on the premises a system to dispose of the sewage generated within the building, residence or other facility.

b. If a public or community sewerage system is available and a new building is being constructed then the building sewer shall be connected to the available sewage system.

c. A public or community sewerage system shall be considered available if it is within two hundred

(200) feet by gravity flow of the structure to be served.

d. When a public or community sewerage system has become available to a premises served by an on-site sewage management system, the owner, lessee, or agent shall be required to connect properties affected to the public or community sewerage system immediately.

e. No township or county planning commission or zoning board, authorized to review plats or subdivisions of land, shall recommend for approval any plat containing one or more lots or building sites having less than two (2) acres of land, unless a public waste water system is provided to serve all properties within the subdivision or surety bond in an amount stipulated by the Board of County Commissioners is filed with the County Treasurer to guarantee the installation of such public system.

2-4.6 SEWAGE CONDUITS FOR ON-SITE SEWAGE MANAGEMENT SYSTEMS

a. SIZE OF SEWAGE CONDUITS. Sewage conduits connecting component parts of on-site sewage management systems shall be a minimum of 4 inches in diameter.

b. MATERIALS. All pipe and fittings used in sewage conduits and/or in absorption fields shall meet nationally recognized standards for their designated use, such as Standards published by the American Society for Testing and Materials or the National Sanitation Foundation and shall have been approved by the Health Department for use in on-site sewage management systems. Sewage conduits under driveways or similar areas of load or impact shall be of material capable of withstanding maximum anticipated loads. All sewage and lateral pipe shall be marked to indicated it meets or exceeds a 1,000 pound "crush test" rating.

c. CONSTRUCTION. Sewage conduits (other than perforated pipe used in absorption fields) shall be installed with sealed, water tight, root resistant joints and shall be laid on a firm foundation. This shall not be subject to settling, and shall be installed at a grade not less than one eighth (1/8) inch per foot. All pipe from the structure to the lateral field shall be laid "bells up" if bell and spigot pipe are used.

d. CLEANOUTS. Cleanouts shall be placed at the junction of the building drain and building sewer at intervals not to exceed 100 feet in straight runs

as required by the Administrative Agency.

SECTION 2-5.0 ON-SITE SEWAGE MANAGEMENT SYSTEMS

2-5.01 EXISTING SYSTEMS. On-site waste water management systems in use at the time of the adoption of this code may continue to be used unless they:

a. Have been enjoined as a public health nuisance by a court of competent jurisdiction or

b. Discharge onto the surface of the ground, or waters of the state as defined in K.S.A. 65-161(A); or

c. Receive non-domestic waste water, cause vector breeding, produce offensive odors, or any conditions that are detrimental to health and comfort.

2-5.1 PERMITS REQUIRED

a. No person shall be issued a required building permit from Planning and Zoning Department without having first obtained from the Administrative Agency permission to construct an approved sewage management system. A fee shall be charged by the Administrative Agency for evaluation of the on-site sewage management system, if indicated.

b. No person shall construct or alter an on-site sewage management system without obtaining construction approval for such purpose from the Administrative Agency. No permit for the construction, or alteration of an on-site sewage management system shall be issued until the Administrative Agency has inspected and approved the site and the proposed location and design of the on-site sewage management system. A fee shall be charged by the Administrative Agency for the service. No on-site sewage management system constructed or altered may be covered totally or in part until it has been inspected and approved by the Administrative Agency. The system may be inspected by the Administrative Agency at any stage of the construction.

c. All applicants will be required to sign an application form to acknowledge the sewer system must be inspected and installed according to the approved plan.

d. No newly constructed house or structure shall be occupied or used until a final inspection shows the on-site sewage management system has been approved by the Administrative Agency.

2-5.2 DATA REQUIREMENTS

a. RESIDENTIAL. The following shall be submitted to and accepted by the Health Department before issuance of a permit to construct an on-site sewage management system:

1. A drawing (an 8 1/2" X 11" pencil is recommended), showing the following:

a. Name, address and phone number of applicant and owner.

b. Location of building site, including legal description with section, township and range.

c. Number of bedrooms.

d. A drawing of the lot or size, showing:
1. Overall dimensions of the lot;
2. Location of buildings, driveways and geographical features near the proposed lateral field;
3. Location and type of water supply, and location of water service lines;
4. Layout of entire on-site sewage management system, septic tank, laterals and interconnecting lines; and
5. A cross section of lateral trench, with dimensions.

e. Foundation, footing or any other non-sewage drain location.

f. Arrow indicating North direction.

g. Existing and proposed utilities, easements and structures.

2. The Administrative Agency may require other supportive data or information pertinent to design of wastewater system.

b. COMMERCIAL. The following data shall be submitted to and accepted by the Administrative Agency prior

to issuance of permit to construct an on-site sewage management system.

1. Name, address and phone number of applicant and owner;
2. Type of establishment;
3. Location of building site, including legal

description with section, township and range; lot or parcel identification;

4. Anticipated water usage and peak daily sewage flow;
5. All water-using equipment or appliances;
6. Copies of a site plan of the entire property under development showing the following:
   a. Overall dimensions of the lot, area in square feet;
   b. Location of buildings, structures, driveways, parking, access roads, loading areas, receptacle and any geographical features near the proposed on-site sewage management system;
   c. Location and type of water supply, and location of water service lines;
   d. Proposed type, size and location of on-site sewage management system;
   e. Existing and proposed topography.
7. Special wastewater treatment.

2-5.3 FIELD DATA REQUIREMENTS - Prior to construction.

a. WATER TABLE BORINGS. Borings to determine groundwater elevation in low areas may be required by the Administrative Agency. Borings shall be made to a minimum depth of seven (7) feet. Water table elevations shall not be recorded until sufficient time has elapsed for stabilization of groundwater (such stabilization in clay soils may require several hours or overnight). Location, identification number and depth to water table shall be recorded on the plat or site plan which may indicate topography, if required. Other records of water table elevation, including seasonal peaks, may be submitted or required.

b. ROCK BORINGS. Where surface outcroppings or subsurface rock or hardpan exist or are suspected, a sufficient number of borings to a minimum depth of four (4) feet may be required by the Administrative Agency to determine if such conditions may interfere with installation, performance or repair or the proposed on-site sewage management system. Boring location and data shall be recorded by number on the plat or site plan which may indicate topography, if required.

c. Evidence of the presence of water in the borings performed under 2-5.3a or 2-5.3b shall negate the use of conventional on-site sewage management systems in that area. Innovative or alternative systems may be reviewed on an individual basis.

Evidence of rock in the borings may negate the use of a system in that area.

d. Soil analysis such as percolation tests and other field tests may be required. The number, depth and location shall be determined by standards recommended by the Kansas Department of Health & Environment.

e. The proposed location of the house must be staked, property corners must be staked or flagged, and the lateral field area must be staked or flagged.

2-5.4 SEPTIC TANKS

a. APPROVAL PROCEDURES. Any person seeking approval of septic tanks to be used in on-site sewage management systems other than those of standard size and configuration made with reinforced concrete, shall submit detailed plans and specifications, tests and performance data and quality control procedures as may be required by the Administrative Agency for complete understanding and evaluation of the product. No other septic tanks shall be installed unless specific written approval is granted by the Administrative Agency.

b. MINIMUM DESIGN AND CONSTRUCTION. Septic tanks shall be watertight and constructed of solid concrete. Precast tanks shall have a minimum wall thickness of 2 and 1/2 inches, and must be adequately reinforced to facilitate handling. When precast slabs are used as covers, they should have a thickness of at least three (3) inches and be adequately reinforced. The distance from the top of the tank and the liquid line shall be at least twenty (20) percent of the liquid depth.

c. COMPARTMENTS. A two compartment septic tank shall meet the following criteria:

1. The inlet compartment shall have not less than one-half to two-thirds of the total capacity of the tank nor less that 1000 gallons liquid capacity.

2. Venting between compartments must be provided to allow free passage of gas.

3. Baffles shall be made of fiber glass, acid-resistant concrete, or other material approved by the Administrative Agency.

d. CAPACITY. The liquid capacity of septic tanks shall be as follows, unless a larger size is required to serve the purpose of this code as judged by the Administrative Agency.

1. Single family residences - 1000 gallons or more.

2. Commercial - 1000 gallons or more based on loading and anticipated water usage and sewage produced.

3. Other - 1000 gallons or more.

e. LOCATION. The septic tank and absorption field shall be located as set forth in Table A and shall:

1. Be installed at least twenty-five (25) feet distance from the following:
   a. Houses or structures if set below the lowest floor;
   b. Property lines;
   c. Public water supplies and lines, cisterns;
   d. Driveways;
   e. Foundation drains;
   f. Streams, ponds, lakes;
   g. Basements, cellars;
   h. Public water supply mains;
   i. Buried utility lines.

2. Be a minimum of seventy-five (75) feet from any non-public water well supply;

3. Have undisturbed soil between the water line and sewer line, and the lines can not be in the same trench;

4. Unless otherwise exempt under Zoning Regulations for the unincorporated area of Doniphan County, Kansas, and amendments thereto, individual on-site septic tank lateral systems must have a minimum of two (2) acres of ground, no more than one-half acre of which may be roads, streets, lakes or waterways.

5. The Administrative Agency, after site inspection, may stipulate variations of these distances cited herein, due to adverse site conditions including location of a well on-site or nearby; site configuration or structural placement; sub-surface geologic characteristics and/or ground water interference. If granted, these variations of distances shall not, in anyway, compromise the purpose of this code to protect water resources and the public health.

f. FOUNDATION AND BACKFILL. Septic tanks shall be constructed or installed level on a foundation that will prevent settling. Backfill shall be free of voids, stumps, broken masonry or other such materials. The lid of the tank shall be covered with earth.

g. ACCESS AND INSPECTION. Access to each compartment shall be provided by at least one manhole. Inspection holes or manholes should be located over the inlet and outlet pipes.

h. INLET PIPE. The inlet invert should be located at least three (3) inches above the liquid level in the tank. A vented inlet tee or baffle must be used to divert the incoming sewage downward. It should extend at least twelve (12) inches below the liquid level, but the penetration must not be greater than that provided by the outlet device.

i. OUTLET PIPE. The outlet device must extend below the liquid surface a distance equal to forty (40) percent of the liquid depth. A vented outlet tee should be provided when an overhead distribution line is used.

j. SEALED. A watertight seal shall be made around the inlet and outlet pipes with a bonding compound that will adhere both to the concrete septic tank and the exterior surfaces of the inlet and outlet pipes. The lid shall be sealed to the walls of the tank. Any holes in the tank must be sealed so that the tank is watertight.

2-5.5 ABSORPTION FIELDS.

a. AREA COMPUTATION. The following criteria shall be used to determine the amount of lateral required:

1. SINGLE FAMILY RESIDENCE - 150 square feet of absorption area per bedroom.

2. COMMERCIAL. (i.e., Day Care Facilities, Churches and other commercial establishments permitted to use absorption fields, which treats domestic waste water). Commercial septic tanks - Lateral field sewage disposal systems shall be designed on loading and anticipated water usage and sewage produced. A minimum of 150 square feet of absorption area shall be required for each 100 gallons of water used per month.

These standards are based on "average" soil conditions found in most areas of Doniphan County. The total number of lineal feet of required lateral may be increased if soil conditions and other conditions found are different than the average.

b. ABSORPTION FIELD LOCATION RESTRICTIONS. See 2-5.4e.

c. MINIMUM DESIGN AND CONSTRUCTION.

1. An absorption trench shall not exceed one hundred (100) feet in length from where it is fed unless

specific approval is given by the Administrative Agency. Absorption trenches shall be between twenty-five (25) inches and thirty-two (32) inches in depth. The trench shall be a minimum of twenty-four (24) inches wide. Each lateral line should be at least seven (7) feet apart from each other.

2. Installations of laterals must be along contour lines so that level trenches of uniform depth can be constructed. The bottom of the lateral trench is to be level.

3. A twelve (12) inch depth of 3/4 to 1 1/2 inches washed lateral rock (i.e. aggregate) shall be provided in the bottom of the trench. Perforated pipe shall be laid in the center of the lateral rock; perforations shall be oriented toward the bottom of the trench. Lateral rock shall be placed under the perforated pipe to the minimum depth of the trench and two (2) inches of lateral rock shall cover the perforated pipe. All lateral pipe shall be four (4) inches in diameter and a minimum of one thousand (1,000) pound "crush".

4. A continuous layer of two to four inches of hay, straw or other approved permeable material shall be placed over the lateral rock before backfilling with the earth cover.

5. Ten (10) inch minimum to eighteen (18) inch maximum earth cover shall be placed over the lateral rock. The earth cover over the lateral rock must be of uniform depth.

6. Excavation for absorption trenches in wet clay soils and smearing of trench walls and bottoms shall be avoided since reduced permeability may result and approvals may be voided thereby.

7. The ground surface of the lateral field area shall be so graded as to prevent the accumulation of surface water and to minimize the flow of surface water over the lateral field. Test holes, diverter ditches or flow control devices will be required under some circumstances. It may be necessary to prepare the ground for the lateral field, such as removal of rocks, trees or replacement of soil.

8. There shall be a minimum of four feet between the bottom of the absorption trench and a water table.

d. FIELD LAYOUT METHODS

1. SEQUENTIAL STEP-DOWN OR "OVERHEAD" SYSTEM. This method is well suited to terrain with a slope. in

this system, effluent is not distributed equally to all the lateral lines. Instead, the lines are filled sequentially, and diversion to the next line does not occur until the fluid level in the preceding trench reaches slightly above the top of the rock fill. The installation of laterals must be along contour lines so that level trenches of uniform depth can be constructed. The bottom of the lateral trench is to be level. The overhead distribution line must be connected at the center of each lateral line, and at any elevation so that the bottom of the overhead line is two (2) inches above the lateral rock in the absorption trench. The overhead distribution line must be set on a firm foundation of undisturbed earth. The sequential system is illustrated in Figure A.

2. LEVEL FIELD METHOD. On flat terrain the level field method may be used. When this method is used, all distribution trenches shall be installed level and at the same elevation, shall not exceed one hundred (100) feet in length and shall be connected at the ends to form a continuous system. A standard tee fitting shall be used to distribute treated sewage. A standard tee fitting shall be used to effect a juncture of the ends of any three distribution lines. The level field method is illustrated in Figure B. These requirements are based on average slope conditions found in most areas of Doniphan County. Other systems used will require prior approval of the Administrative Agency.

2-6.0 ALTERNATIVE AND EXPERIMENTAL ON-SITE SEWAGE MANAGEMENT SYSTEMS

Consideration of Alternative systems of Experimental and Innovative Sewage Disposal System:

When requested and/or where appropriate, and after thorough assessment of alternative systems, the Administrative Agency will consider alternative on-site sewage management systems and/or site modifications for conventional or alternative systems in areas of marginal suitability.

The Administrative Agency may require the alternative, experimental and innovative sewage disposal systems to be designed by a professional engineer and may ask for review of the proposal by Kansas Department of Health & Environment. Additional monitoring and reporting requirements of alternative systems may be required by the Administrative Agency.

2-6.1 WASTE STABILIZATION POND (LAGOON)

a. The use of individual waste stabilization ponds, usually referred to as "lagoons", will be considered in place of a Septic tank-lateral field disposal system based on useable acreage, suitable solid or other parameters as deemed necessary by the Administrative Agency.

b. No permit shall be issued until a suitable site has been approved by the Administrative Agency. No one shall occupy a residence until the Administrative Agency has approved the Waste Stabilization Pond.

c. Waste Stabilization Ponds must have a minimum horizontal separation of 100 feet from the designated operational water surface to other properties, allowing public right-of-way to be counted as part of the separation.

d. Waste Stabilization Ponds shall be maintained in good working condition and shall be fenced with a minimum 4 foot high woven or welded wire fencing with 2 inch X 4 inch maximum openings.

2-6.2 SEWAGE LIFT PUMP

In the event that the sewage generated from a building or residence cannot be plumbed to an absorption field or sanitary sewer by gravity, then a sewage lift pump with the necessary appurtenances as determined by the Administrative Agency may be required. The pump chamber must be sealed, odor proof, and watertight. The pump(s) must be kept in good working order.

2-6.3 WATERLESS TOILETS (PRIVY)

The use of privies and other types of dry or chemical toilets may be allowed subject to the approval of the Administrative Agency, and meeting specified design requirements.

2-6.4 OTHER

Cesspools and sand filters shall be prohibited as new or permanent installations. However, portable holding tanks serving camping, recreation vehicles and boats are acceptable. Portable toilets equipped with holding or storage tanks, chemical or otherwise, shall be prohibited except on a temporary basis as determined acceptable by the Administrative Agency.

2-6.5 TRAPS

2-6.5.1 GREASE TRAPS

a. Grease Traps Required. Grease Traps are neither

necessary nor recommended for on-site sewage management systems serving residences, but shall be required for those on-site sewage management systems serving commercial or industrial establishments where it is determined by the Administrative Agency that introduction of grease into the on-site system might adversely affect it.

b. Grease Trap Design. Grease trap plans and specifications shall be submitted to the Administrative Agency for approval. No human waste shall pass through the grease trap. No grease trap shall have less than one hundred twenty-five (125) gallons capacity and effluent shall be directed to the sewage system. Grease traps shall be sized with a minimum capacity by multiplying three (3) gallons times the maximum occupancy (as set forth by the appropriate Fire Department) times two (2). Grease traps must be maintained properly and emptied regularly.

2-6.5.2 GRIT TRAP

Grit traps such as those in commercial or industrial establishments, (i.e., car washes, services stations) shall be emptied by a licensed hauler and transported to a point of disposal approved by the Administrative Agency.

2-7.0 SANITARY SERVICES

2-7.1 All individuals who remove treated domestic wastes, human excreta or other septage from any septic system or alternative wastewater system, including their own, must notify the Administrative Agency before removing the wastes. They shall follow all rules, regulations and requirements of the Kansas Department of Health and Environment and Environmental Protection Agency 503 Rules which address septage management.

2-7.2 SITE. The disposal site used by the haulers of domestic wastes, human excreta or other septage from any septic system or alternative waste water system must be approved by the Administrative Agency and comply with all rules, regulations and requirements of the Kansas Department of Health and Environment and Environmental Protection Agency 503 Rules which address septage management.

2-7.3 LICENSE REQUIRED. An individual may annually remove 1,000 gallons of treated domestic waste from their own septic system, or alternative wastewater system, or privy. The waste may be disposed of by broadcasting it over farm ground, followed by incorporating it into the soil. Before an individual removes domestic waste from septic systems, alternate wastewater systems, privies or

offers to haul or transport any domestic, industrial or commercial waste, human excrete or septage other than his/her own, he/she must have a valid license from the Administrative Agency. A valid sanitary service license issued to a sole proprietor, a partnership or corporation shall be valid as to all its agents and employees.

2-7.4 MINIMUM STANDARDS FOR SANITARY SERVICE VEHICLE. All sanitary services vehicles used for rendering of sanitary services shall be of water tight construction, maintained in good working condition and provided with hoses, couplings, valves, pumps and other necessary equipment to insure that all material removed from the system will be transported to a point of disposal approved by the Administrative Agency without spillage of the waste onto the road or street. All hoses and valves shall be capped or plugged. All equipment shall be in good workable condition and the operator shall demonstrate that the equipment is in good operating condition and will perform its function without leakage or spillage. The operator will contact the Administrative Agency for equipment inspection initially and annually before license will be approved.

2-7.5 APPLICATION AND INSPECTION FEE. Every person wishing to obtain a sanitary service license shall make application for a license on forms provided for this purpose and shall pay the inspection fees for sanitary service vehicles prescribed in Section 2-9.4 before filing the application with the Health Department. A receipt showing such payment shall be attached to the application form. In case the license is denied, no portion of the inspection fee will be refunded. A copy of a written contract between the applicant and a public waste water system or the owner of a land disposal site approved by the Administrative Agency allowing the applicant to dispose of all waste matter at that particular site shall be attached to the application.

2-7.6 FEES. The fees shall be established by resolution of the Board of County Commissioners.

2-7.7 CONTRACTING WITH UNLICENSED PERSONS PROHIBITED. A person responsible for operating an alternative waste water system, septic system or privy shall not contract, or offer to contract, with any person for sanitary service unless that person holds a valid permit or license to provide such service from the Administrative Agency.

2-8.0 WASTE WATER SYSTEM INSTALLER AND REPAIR/MAINTENANCE CONTRACTOR

2-8.1 LICENSE REQUIRED. No person shall offer service as a waste water system installer, nor shall perform stated

services in Doniphan County without a valid license from the Administrative Agency. A valid waste water system installer license issued to a sole proprietor, a partnership or a corporation shall be valid as to all its agents and employees.

2-8.2 APPLICATION. Application for waste water systems installation license shall be applied for through the Administrative Agency . License approval is based on meeting minimum standards for waste water system installation.

2-8.3 MINIMUM STANDARDS FOR WASTE WATER SYSTEM INSTALLER. Knowledge of Doniphan County Environmental/Sanitary Code and pass a waste water system installer license examination approved by the Administrative Agency.

2-8.4 FEES. Fees for licensure shall be established by the Board of County Commissioners. Fees will be paid annually for license renewal. After application is approved the installers name goes on a list of licensed installers. If repair of old, or installation of a new system is not done by an approved installer it's considered a violation of this code. Sewage Facility Application/Permit fee shall be established by the Board of County Commissioners. (see exceptions).

2-8.5 EXCEPTIONS. If an individual landowner intends to install or repair his/her own waste water system the Administrative Agency will grant such request without requiring said license based on the installation meeting Environmental/Sanitary Codes, the willingness of the individual to obtain a permit from the Administrative Agency and that he/she constructs no more than one system in any one calendar year.

2-8.6 WAIVER OF REQUIREMENTS. In unusual cases where compliance with the requirements of Chapter 2 of this code is not feasible, the Administrative Agency shall have the authority to waive the requirements, provided the Administrative Agency is furnished with reliable information to show that such waiver does not and will not impair the quality of the water or otherwise endanger the ecosystem.

TABLE A
LOCATION OF SEWAGE DISPOSAL SYSTEM

Minimum Horizontal Distance In Clear Required From	Septic Tank	Disposal Field
House or structures	10 ft	10 ft
Property line	25 ft	50 ft
Water supply (private-well)	50 ft	100 ft
Streams	50 ft	100 ft
Water line	25 ft	25 ft
Driveway	25 ft	25 ft
Buried utility lines		25 ft
Foundation drains	25 ft	25 ft
Drop-offs		25 ft
Basement	25 ft	25 ft
Cellar	25 ft	25 ft
Pond	25 ft	25 ft
Cistern	25 ft	25 ft
Water mains	25 ft	25 ft
Public water supply well (See attachment C)	100 ft	100 ft
Semi public water supply well	100 ft	100 ft

DONIPHAN COUNTY
ADMINISTRATIVE PROCEDURES FOR ON-SITE SEWAGE
MANAGEMENT SYSTEM APPROVAL

1. Sewage Facility Application/Permit submitted for approval for construction to the Administrative Agency.
2. Site evaluation and approval for construction by Administrative Agency.
3. Application for Building Permit to Planning & Zoning Commission (if applicable).
4. Building Permit issued to proceed with construction from Planning & Zoning Commission (if applicable).
5. Prior to covering of system, owner/installer to notify Administrative Agency for inspection.
6. Final inspection by Administrative Agency.

IF FINAL INSPECTION IS UNSATISFACTORY:

1. Notification from Administrative Agency to owner directing specific corrections.
2. Follow-up inspection by Administrative Agency.
3. If corrections not made, Administrative Agency letter to owner to make corrections for approval-copy to County Attorney.
4. Follow-up inspection by Administrative Agency.
5. If corrections not made, County Attorney letter to owner to make corrections for approval-copy to Health Department.

6. Follow-up inspection by Administrative Agency.
7. If corrections not made, complaint signed by Administrative Agency to proceed with legal action, if necessary.

IF FINAL INSPECTION IS SATISFACTORY:

1. Final inspection approval notice will be filed with Planning & Zoning Commission.
2. Use permit attached with building permit (if applicable).

FIGURE A

THE COMPARTMENTALIZED SEPTIC TANK

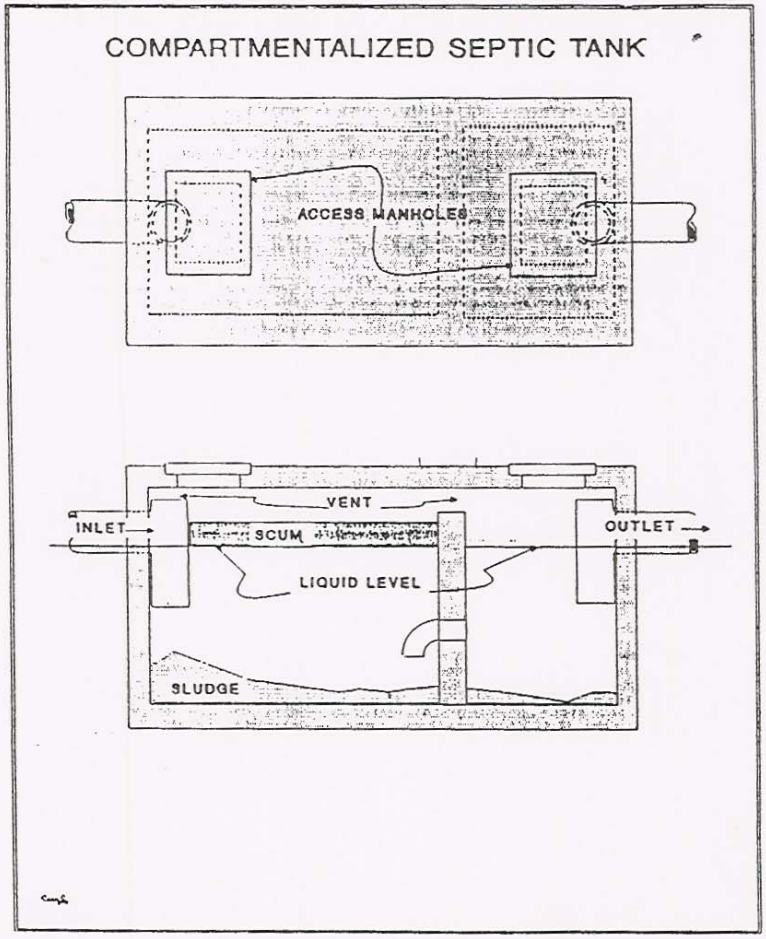


FIGURE B

ABSORPTION TRENCH

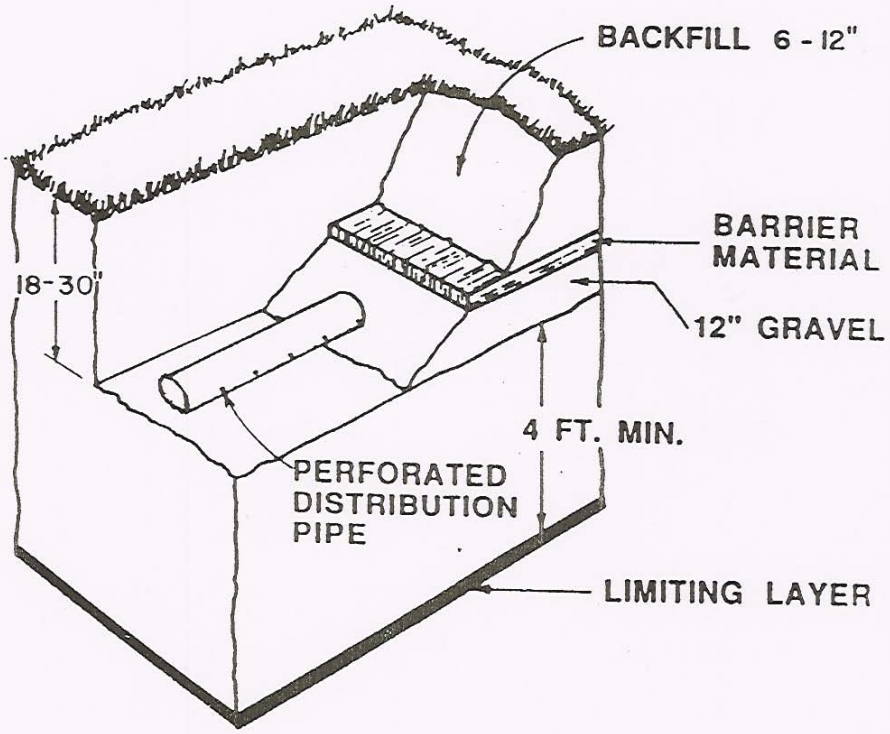
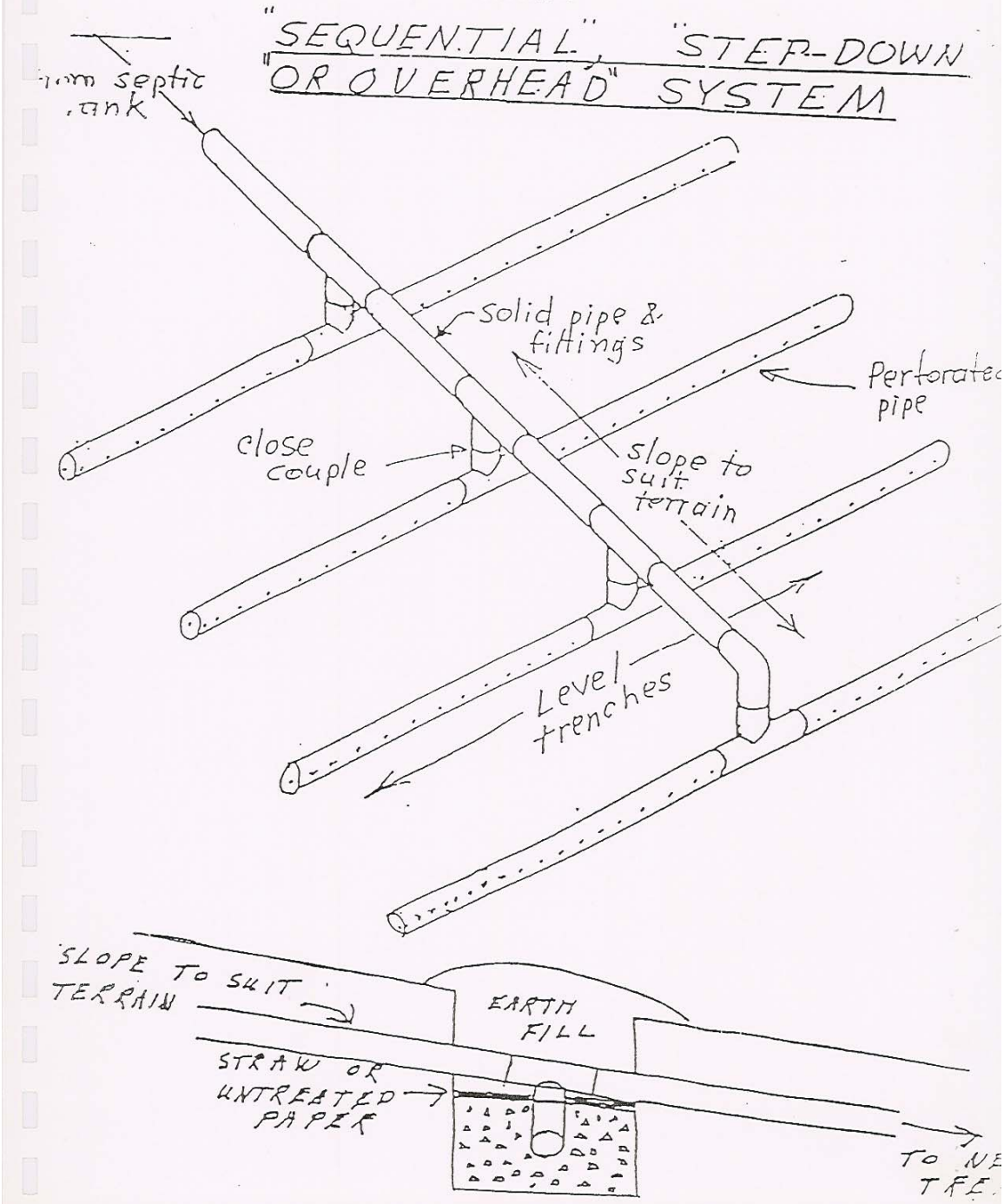
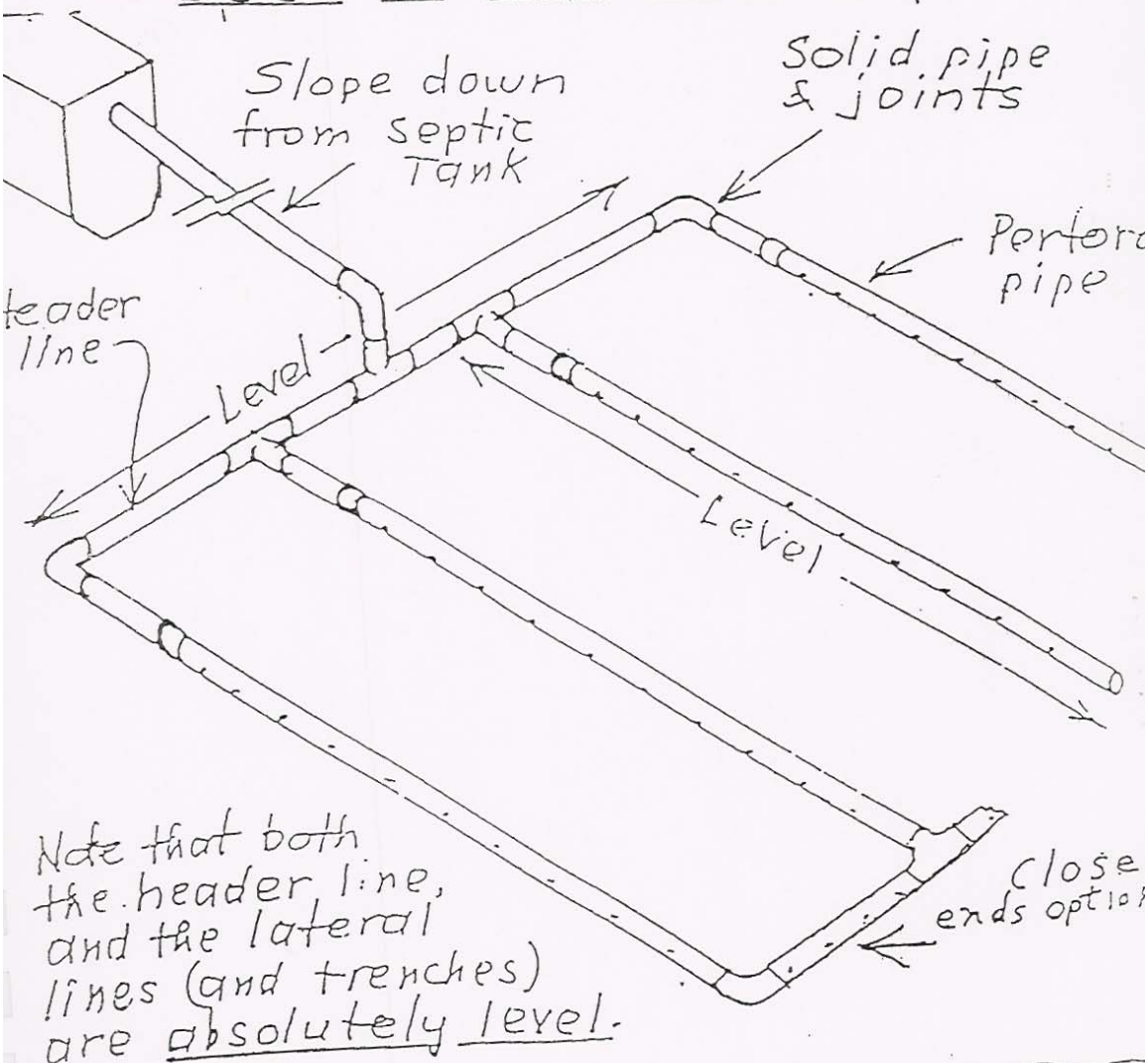


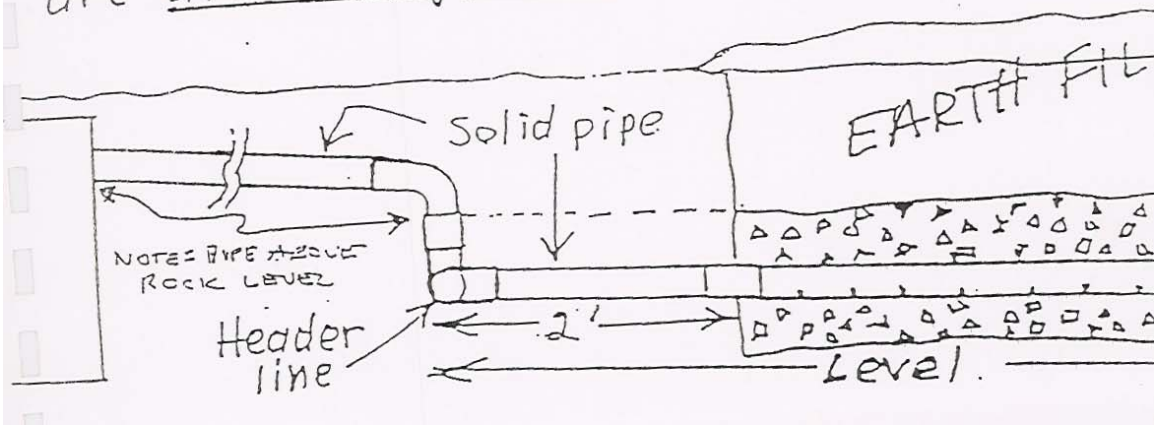
FIGURE C


"SEQUENTIAL", "STEP-DOWN
"OR OVERHEAD" SYSTEM
septic
tank
Solid pipe &
fittings
Perforated
pipe
close
couple
slope to
suit
terrain
Level
trenches
SLOPE TO SUIT
TERRAIN
EARTH
FILL
STRAW OR
UNTREATED
PAPER

System for Level Ground only

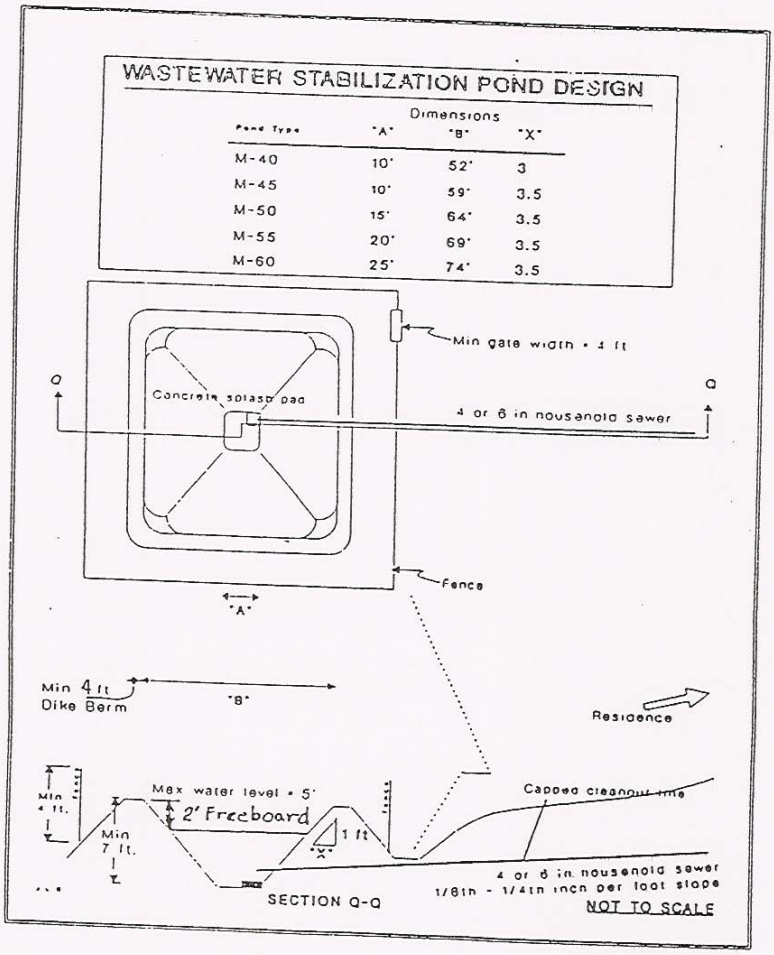


Note that both the header line, and the lateral lines (and trenches) are absolutely level.



ATTACHMENT A

POND DESIGN

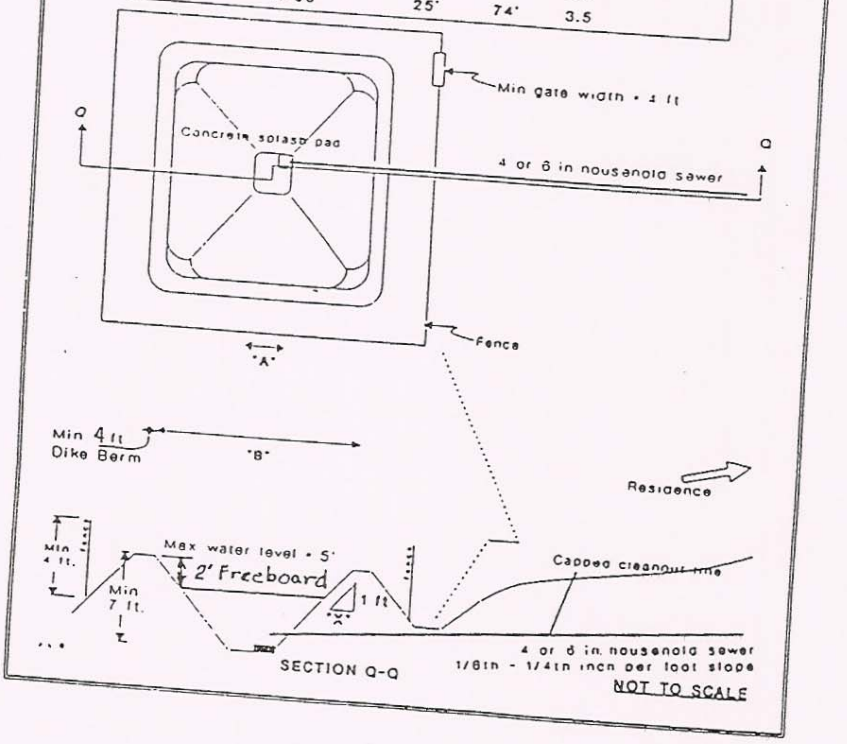


ATTACHMENT A

POND DESIGN

WASTEWATER STABILIZATION POND DESIGN

Pond Type	Dimensions "A"	"B"	"X"
M-40	10'	52'	3
M-45	10'	59'	3.5
M-50	15'	64'	3.5
M-55	20'	69'	3.5
M-60	25'	74'	3.5



ENVIRONMENTAL/SANITARY CODE
OF
DONIPHAN COUNTY, KANSAS
Chapter 3

WATER SUPPLIES

SECTION 3-1.0 PURPOSE AND INTENT:

The provisions of this code are for the purpose of regulating the development, maintenance, and use of private or semi-public water supplies in the unincorporated area of Doniphan 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.

3-1.1 AREA OF APPLICABILITY: This code shall be in effect for all areas of Doniphan County with the exception of incorporated cities and Indian Reservations.

3-1.2 COMPLIANCE REQUIRED: After the effective date of this code, no person shall construct on any property subject to this code, any public, semi-public or private water supply that does not comply with the requirements of this code.

SECTION 3-2.0 DEFINITIONS:

The words, terms and phrases listed below for purposes of this code shall be defined and interpreted as follows:

3-2.1 ABANDONED WATER WELL. A well:

a. which has been permanently discontinued from use;
b. from which the pumping equipment has been permanently removed;
c. which is in such a state of disrepair that it cannot be used to supply water, or it has the potential for transmitting surface contaminants into the aquifer or both;
d. which possesses potential health and safety hazards; or
e. which is in such a condition it cannot be placed in active or inactive status.

3-2.2 ACTIVE WELL. A water well which is an operating well used to withdraw water, monitor or observe groundwater conditions

3-2.3 ANNULAR SPACE. The space between the well casing and the well bore or the space between two (2) or more strings of well casing.

3-2.4 AQUIFER. An underground formation that contains and is capable of transmitting groundwater.

3-2.5 CONFINED AQUIFER. An aquifer overlain and underlain by impermeable layers. 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.

3-2.6 CONSTRUCTION OF WATER WELLS. All acts necessary to obtaining groundwater by any method for any use including, without limitation, the location of an excavation for the well.

3-2.7 DOMESTIC PURPOSE. Water used for drinking, culinary and ablutionary purposes.

3-2.8 GROUNDWATER. That part of the subsurface water which is in the zone of saturation.

3-2.9 GROUT. Material such as cement grout, neat cement grout, bentonite clay grout or other material approved by Kansas Department of Health & Environment (KDH&E) used to create a permanent impervious watertight bond between the casing and the undisturbed formation surrounding the casing or between two (2) or more strings of casing.

a. Neat Cement Grout: A mixture consisting of one (1) ninety-four (94) pound bag of portland cement to five (5) to six (6) gallons of clean water.

b. Cement Grout: A mixture consisting of one (1) ninety four (94) pound bag of portland cement to an equal volume of sand having a diameter no greater that 0.080 inches (2 millimeters) to five (5) to six (6) gallons of clean water.

c. Bentonite Clay Grout: A mixture consisting of water and commercial grouting or plugging sodium bentonite clay containing high solids such as that manufactured under the trade name of "volclay grout", or an equivalent as approved by KDH&E.

1. The mixture shall be as per the manufacturer's recommendations to achieve a weight of not less than 9.4 pounds per gallon of mix. Weighing agents may be added as per the manufacturer's recommendations.

2. Sodium bentonite pellets, tablets or granular sodium bentonite may also be used provided they

meet the specifications listed in K.A.R. 28-30-2 (k)(3).

3. Sodium bentonite products that contain low solids, are designed for drilling purposes, or that contain organic polymers shall not be used.

3-2.10 GROUT TREMIE PIPE or GROUT PIPE. A steel or galvanized steel pipe or similar pipe having equivalent structural soundness that is used to conduct pumped grout to a point of selected emplacement during the grouting of a well casing or plugging of an abandoned well or test hole.

3-2.11 HEAT PUMP HOLE. A hole filled to install piping for an earth coupled water source heat pump system, also known as a vertical closed loop system.

3-2.12 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.

3-2.13 PITLESS WELL ADAPTER OR UNIT. An assembly of parts installed below frost line which will permit pumped groundwater to pass through the wall of a casing or extension thereof and prevent entrance of contaminants.

3-2.14 POTABLE WATER. Water free from impurities in amounts sufficient to cause disease or harmful physiological effects in humans and conforming with the latest Kansas Department of Health and Environment regulations.

3-2.15 PRIVATE WATER SUPPLY. A water supply used for domestic purposes which serves not more than one (1) dwelling on a piped system.

3-2.16 PUBLIC WATER SUPPLY WELL. A well that provides groundwater to the public for human consumption; if such system has at least 10 service connections or serves an average of at least 25 individuals daily at least 60 days out of the year.

3-2.17 PUMP PIT. A water tight structure constructed at least two (2) 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.

3-2.18 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.

3-2.19 SANITARY WELL SEAL. A manufactured seal installed at the top of the well casing which, when installed, created an

air and watertight seal to prevent contaminated or polluted water from gaining access to the groundwater supply.

3-2.20 SEMI-PUBLIC WATER SUPPLY. A water supply used for domestic purposes serving two (2) to nine (9) residential units (rental or under separate ownership) on a piped system.

3-2.21 STATIC WATER LEVEL. The highest point below or above ground level which the groundwater in the well reaches naturally.

3-2.22 TEST HOLE. Any excavation constructed for the purpose of determining the geologic and hydrologic characteristics of underground formations.

3-2.23 TREATMENT. The stimulation of production of groundwater from a water well through the use of Hydrochloric Acid, Muriatic Acid, Sulfamic Acid, Calcium or Sodium Hypochlorite, Polyphosphates or other chemicals and mechanical means, for the purpose of reducing or removing Iron and Magnesium Carbonate deposits and lime deposits associated with Iron or Manganese bacterial growths which inhibit the movement of groundwater into the well.

3-2.24 UNCASED TEST HOLE. Any test hole in which casing has been removed or in which casing has not been removed or in which casing has not been installed.

3-2.25 UNCONFINED AQUIFER. An aquifer containing groundwater at atmospheric pressure. The upper surface of the groundwater in an unconfined aquifer is the water table.

3-2.26 WATER DISTRICT. Any special district authorized and empowered by state statutes to plan, construct and/or operate a public water supply system.

3-2.27 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.

3-2.28 WATER WELL CONTRACTOR OR CONTRACTOR. Any state licensed individual, firm, partnership, association or corporation who shall construct, reconstruct or treat a water well. The term shall not include:

A. An individual while in the act of constructing a water well on land which is owned by him/her and is used by him/her for farming, ranching or agricultural purposes or at his/her place of abode, but only when the well is constructed in compliance with prescribed minimum well standards and the

requirement of well logs as required by KDH&E in K.A.R. 28-30-4 and any amendments.

B. An individual who performs labor or services for a licensed water well contractor at the contractors direction and under the contractors supervision.

SECTION 3-3.0 REQUIREMENTS FOR PUBLIC WATER SUPPLIES

3-3.1 STATE PERMIT. No person shall operate a public water supply without obtaining a permit from KDH&E. A copy of the permit shall be filed with the local Administrative Agency.

3-3.2 STATE APPROVED PLANS. No person shall construct any public water supply on any property subject to the provisions of this code until the plans and specifications have been submitted to and approved by KDH&E. A copy of the plans and specifications shall be filed with the local Administrative Agency.

SECTION 3-4.0 REQUIREMENTS FOR SEMI-PUBLIC WATER SUPPLIES

3-4.1 No person shall operate or maintain a semi-public water supply system that has been:

a. Constructed or reconstructed after adoption of this code, until it has been inspected and a permit issued by the Kansas Department of Health & Environment.

b. Temporarily or permanently enjoined as a public health nuisance by a court of competent jurisdiction.

c. Found by the Kansas Department of Health & Environment not to comply with the provisions of this code and a written notice thereof has been given to the owner of his/her agent.

3-4.2 USE OF A SEMI-PUBLIC WATER SUPPLY. In addition to the requirements of 3-6.0 which pertain to private water wells, the following shall be done and reviewed by the Kansas Department of Health & Environment prior to the issuance of a permit, to assure water quality for the public:

a. An initial and at least annual Bacterial Analysis.

b. A partial Chemical Analysis is to be done initially and every three (3) years thereafter.

c. Other tests such as a screen for Pesticides, Volatile Organic Chemicals, and Heavy Metals may be

required, at the direction of the Administrative Agency, to protect the public's health. The water samples shall be collected by the Health Department or its designee and sent to the KDH&E lab or other state certified lab for analysis. The fee for the analysis and investigation is the responsibility of the owner of the water supply or his representative.

SECTION 3-5.0 REQUIREMENTS FOR PRIVATE WATER SUPPLIES

3-5.1 PERMIT. No person shall drill, develop or construct any private water supply on any premises subject to the regulations of this code until he/she has obtained a permit there or from the Administrative Agency.

3-5.2 USE LIMITATION.

A. No use of surface water (lakes, ponds or streams) as a source of water for private water supply shall be permitted:

1. Where adequate treatment is not provided. In no case shall surface water be used without filtration, chlorination, or other acceptable means of treatment;
2. Where the pond or lake receives any drainage or discharge from septic tanks, sewage treatment plants or any source of fecal or nutrient contaminations (feed lot, kennels, etc).

SECTION 3-6.0 MINIMUM STANDARDS FOR ALL GROUNDWATER SUPPLIES

3-6.1 LOCATION. The horizontal distance between the non-public water supply wells and the potential sources of pollution or contamination, such as lateral fields, pit privy, seepage pits, fuel or fertilizer storage, pesticide storage, feed lots or barnyards shall be 100 feet or more. (See Attachment C)

3-6.2 CONSTRUCTION. All wells that are to serve as a source of private or semi-private public water shall be constructed in accordance with State Administrative Regulations included under 28-30-6 as amended.

3-6.3 GENERAL OPERATING REQUIREMENTS.

a. Water well record. Within thirty (30) days after construction or reconstruction of a water well, the water well contractor shall submit a report of such work, to the Kansas Department of Health & Environment and to the landowner on the water well record form, (Form WWC-5), provided by the KDH&E. The contractor shall report to the Agency and to the

landowner on the water well record or attachments made thereto any polluted or other non-compliant conditions which the contractor was able to correct and any conditions which the contractor was unable to correct. The contractor shall report to the KDH&E and the landowner the plugging of any abandoned water well. The report shall include the location, landowner's name, method, type of plug material, its placement and amount used to plug the abandoned water well. A landowner who constructs, reconstructs or plugs a water well, which will be or was used by the landowner for farming, ranching or agricultural purposes or is located at the landowner's place of abode, shall submit a water well record on (Form WWC-5) of such work to KDH&E within thirty (30) days after the construction, reconstruction or plugging of the water well. No fee shall be required from the landowner for the record.

b. Artificial recharge and return. The construction of artificial recharge wells and freshwater return wells shall comply with all applicable rules and regulations of KDH&E.

c. Well tests. When a pumping test is run on a well, results of the tests shall be reported on the water well record, (form WWC-5), or a copy of the contractor's record of the pumping tests shall be attached to the water well record.

d. Water samples. Within thirty (30) days after receipt of the water well record, (form WWC-5), the Agency may request the contractor, or landowner who constructs or reconstructs his or her own water well, to submit a sample of water from the well for chemical analysis.

3-6.4 PLUGGING OF ABANDONED WELLS, CASED AND UNCASED TEST HOLES. All water wells abandoned by the landowner on or after July 1, 1979, and all water wells that were abandoned prior to July 1, 1979, which pose a threat to ground water supplies, shall be plugged or caused to be plugged by the landowner in accordance with State Administrative Regulations included under 28-30-7 as amended.

3-6.5 POLLUTION SOURCES. Well locations shall be approved by the Agency with respect to distances from pollution sources and compliance with local regulations. The minimum standards set forth in State Administrative Regulations 28-30-8 as amended, are hereby adopted by Doniphan County. (See Attachment C)

3-6.6 WATER WELL DISINFECTION FOR WELLS CONSTRUCTED OR

RECONSTRUCTED FOR HUMAN CONSUMPTION FOR FOOD PROCESSING. Disinfection standards set forth in State Administrative Regulations 28-30-10 as amended are hereby adopted by Doniphan County as shall apply to all water wells used for public consumption of food processing.

3-6.7 APPEALS

a. Requests for exception to any of the foregoing rules and regulations, as set out within this Chapter 3, shall be submitted to the Administrative Agency in writing and shall contain all information relevant to the request.

   1. Those requests shall set forth specifications as to why such exception should be considered.

   2. The Administrative Agency may grant exceptions when geologic or hydrologic conditions warrant an exception and when such an exception is in keeping with the purposes of the Kansas Ground Water Exploration and Protection Act; provided, however, no such exception shall be granted without a prior written concurrence of KDH&E.

b. Appeals from the decision of the Administrative Agency shall be made to the District Court, who after due consideration may affirm, reverse or modify the decision.

ATTACHMENT A

WATER WELL CONSTRUCTION

Regulations for water wells other than public water supply and reservoir sanitation zone wells are as follows:

a. A water well shall be so located as to minimize the potential for contamination of the delivered or obtained ground water and to protect ground water aquifers from pollution and contamination.

b. GROUTING:

   1. Constructed or reconstructed wells shall be sealed by grouting the annular space between the casing and the well bore from ground level to a minimum of twenty (20) feet or to a minimum of five (5) feet into the first clay of shale layer, if present, whichever is greater. If a pitless well adapter or unit is being installed, the grouting shall start below the junction of the pitless well adapter or unit where it attached to the well casing and shall continue a minimum of twenty (20) feet below this junction or to a minimum of five (5) feet into the first clay or shale layer whichever is greater.

   2. To facilitate grouting, the grouted interval of the well bore shall be drilled to a minimum diameter at least three (3) inches greater than the maximum outside diameter of the well casing. If a pitless well adapter or unit is being installed on the well's casing, the well bore shall be a minimum diameter of at least three (3) inches greater than the outside maximum diameter of the well casing; as it is extended through the grouted interval below the junction of the pitless well adapter or unit where it is attached to the well casing.

c. If ground water is encountered at the depth less than the minimum grouting requirement, the grouting requirement may be modified to meet local conditions if approved by KDH&E.

d. Waters from two(2) or more separate aquifers shall be separated from each other in the bore hole by sealing the bore hole between the aquifers with grout.

e. The well casing shall terminate not less than one foot above the finished ground surface. No casing shall be cut off below the ground surface except to install a pitless well adapter unit which shall extend at least twelve (12) inches above the ground surface. No opening shall be made through the well casing except for installation of a pitless well adapter so designed and fabricated to prevent soil, subsurface and

surface water from entering the well.

f. Well vents shall be used and shall terminate not less than one (1) foot above ground surface and shall be screened with not less than 16-mesh, brass, bronze, copper screen or other screen materials approved by the KDH&E and turned down in a full 180 degree return bend so as to prevent the entrance of contaminating materials.

g. Prior to completion of a constructed or reconstructed well, the well shall be cleaned of mud, drill cuttings and other foreign matter so as to make it suitable for pump installations.

h. CASING: All wells shall have durable watertight casing from at least one (1) foot above finished ground surface to the top of the producing zone of the aquifer. In no event shall the watertight casing extend less than twenty (20) feet below the ground level. Exceptions to either of the above may be granted by the Agency if warranted by local conditions. The casing shall be clean and serviceable and of a type to guarantee reasonable life so as to insure adequate protection to the aquifer or aquifers supplying the ground waters. Used, reclaimed, rejected, or contaminated pipe shall not be used for casing any well. All water well casing shall be approved by KDH&E.

i. All wells, when unattended during construction, reconstruction, treatment or repair, or during use as cased test holes, observation or monitoring wells, shall have the top of the well casing securely capped in a watertight manner to prevent contaminating or polluting materials from gaining access to the groundwater aquifer.

j. During construction, reconstruction, treatment or repair and prior to initiating of use, all wells producing water for human consumption or food processing, shall be disinfected according to K.A.R. 28-30-10 and any amendments.

k. The top of the well casing shall be sealed by installing a sanitary well seal.

l. All ground water producing zones that are known or suspected to contain natural or manmade pollutants shall be adequately cased and grouted off during construction of the well to prevent the movement of the polluted ground water to either overlying or underlying fresh ground water zones.

m. Toxic materials shall not be used in the construction, reconstruction, treatment or plugging of a water well unless those materials are thoroughly flushed from the well prior to use.

n. Any pump pit shall be constructed at least two feet away from

the water well. The pipe from the pump or pressure tank in the pump pit to the water well shall be sealed in a watertight manner where it passed through the wall of the pump pit.

o. Water wells shall not be constructed in pits, basements, garages or crawl spaces. Existing water wells which are reconstructed, abandoned and plugged in basements shall conform to these rules and regulations except that the finished grade of the basement floor shall be considered ground level.

p. All drilling waters used during the construction or reconstruction of any water well shall be initially disinfected by mixing with the water enough sodium hypochlorite to produce at least 100 milligrams per liter, (mg/1), of available chlorine.

q. Natural organic or nutrient producing material shall not be used during the construction, reconstruction or treatment of a well unless it is thoroughly flushed from the well and the ground water aquifer or aquifers before the well is completed. Natural organic or nutrient producing material shall not be added to a grout mix used to grout the well's annular space.

r. PUMP MOUNTING:

1. All pumps installed directly over the well casing shall be so installed that an airtight and water tight seal is made between the top of the well casing and the gear or pump head, pump foundation or pump stand.

2. When the pump is not mounted directly over the well casing and the pump column pipe or pump suction pipe emerges from the top of the well casing, a sanitary well seal shall be installed between the pump column pipe or pump suction pipe and the well casing. An airtight and water tight seal shall be provided for the cable conduit when submersible pumps are used.

(Authorized by K.S.A. 82a-1205; implementing K.S.A. 82a-1205; effective, E-74-34, July 2, 1974; modified, L. 1975, ch.481, May 1, 1975; amended May 1, 1980; amended May 1, 1983; amended May 1, 1987.)

ATTACHMENT B

PLUGGING OF ABANDONED WELLS, CASED AND UNCASED TEST HOLES

A. All water wells abandoned by the landowner on or after July 1, 1979, and all water wells that were abandoned prior to July 1, 1979 which pose a threat to ground water supplies, shall be plugged or caused to be plugged by the landowner, in accordance with State Administrative Regulations included under 28-30-7. In all cases, the landowner shall perform the following as minimum requirements for plugging abandoned wells:

1. The casing shall be cut off three feet below ground surface and removed.

2. All wells shall be plugged from bottom to top using volumes of material equaling at least the inside volume of the well.

3. Plugging top of well:

   a. For cased wells a grout plug shall be placed from six to three feet below ground surface.

   b. For dug wells the lining material shall be removed to at least five feet below ground surface, and then sealed at five feet with a minimum of six inches of concrete or other materials approved by the Agency. compacted surface silts and clays shall be placed over the concrete seal to ground surface.

4. Any ground water displaced upward inside the well casing during the plugging operation shall be removed before additional plugging materials are added.

5. From three feet below ground level to ground level the plugged well shall be covered with compacted surface silts or clays.

6. Compacted clays or grout shall be used to plug all wells from the static water level to six feet below surface.

7. All sand and gravel used in plugging abandoned domestic or public water supply wells shall be chlorinated prior to placement into a well.

B. Abandoned wells, formerly producing ground water from an unconfined aquifer, shall be plugged in accordance with the foregoing and in addition shall have washed sand and gravel or other material approved by KDH&E placed from the bottom of the well to the static water level.

C. Abandoned wells, formerly producing ground water from confined and unconfined aquifers or in confined aquifers only, shall be plugged according to K.A.R. 28-30-7 (a) and by using one of the following additional procedures:

1. The entire well column shall be filled with grout, or other material approved by KDH&E and by use of a grout tremie pipe.

2. A 10 feet grout plug shall be placed opposite the impervious formation or (confining layer) above each confined aquifer or aquifers by use of a grout tremie pipe; and

   a. The space between plugs shall be filled with clays, silts, sand and gravel or grout and shall be placed inside the well so as to prevent bridging.

   b. A grout plug at least 20 feet in length shall be placed with a grout pipe so at least 10 feet of the plug extends below the base of the well casing and at least 10 feet of the plug extends upward inside the bottom of the well casing.

3. Wells that have an open bore hole below the well casing, and where the casing was not grouted into the well bore when the well was constructed, shall be plugged by either (1) or (2) above; except that the top twenty (20) feet of well casing shall be removed or perforated with a casing ripper or similar device prior to plugging. If the well is plugged according to part (2) of this subsection, the screened or perforated intervals below the well casing shall be grouted the entire length by use of a grout tremie pipe.

D. Plugging of abandoned holes. If the hole penetrates an aquifer containing water with more than 1,000 milligrams per liter, (mg/1), total dissolved solids or is in an area determined by the Agency to be contaminated, the entire hole shall be plugged with an approved grouting material from the bottom of the hole up to within three (3) feet of the ground surface using a grout tremie pipe or similar method. From three (3) feet below ground surface to ground the plugged hole shall be covered with compacted surface silts or clays; otherwise, the hole shall be plugged in accordance with the following paragraphs.

1. Plugging of abandoned cased test holes. The casing shall be removed if possible and the abandoned test hole shall be plugged with an approved grouting material from the bottom of the hole up to within three (3) feet of the ground surface, using a grout tremie pipe or similar method. From three (3) feet below ground surface to ground surface the plugged hole shall be covered with compacted surface silts or clays. If the casing cannot

be removed, in addition to plugging the hole with an approved grouting material, the annular space shall also be grouted as described in K.A.R. 28-30-6 or as approved by the KDH&E.

2. Abandoned uncased test holes, exploratory holes or any bore holes except seismic or oil field related exploratory and service holes regulated by the Kansas Corporation Commission under K.S.R. 82-3-115 through 82-3-117. A test hole or bore hole drilled, bored, cored or augured shall be considered an abandoned hole immediately after the completion of all testing, sampling or other operations for which the hole was originally intended. The agency or contractor in charge of the exploratory or other operations intended is responsible for plugging the abandoned hole using the following applicable method, within three (3) calendar days after the termination of testing or other operations.

   a. The entire hole shall be plugged with an approved grouting material from the bottom of the hole to within three (3) feet of the ground surface, using a grout tremie pipe or similar method.

   b. From three (3) feet below ground surface to ground surface the plugged hole shall be covered with compacted surface silts or clays.

   c. For bore holes of twenty-five (25) feet or less, drill cuttings from the original hole may be used to plug the hole in lieu of grouting material, provided that an aquifer is not penetrated or the bore hole is not drilled in an area determined by the KDH&E to be contaminated area.

3. Plugging of heat pump holes drilled for closed loop heat pump systems. The entire hole shall be plugged with an approved grouting material from bottom of the hole, to the bottom of the horizontal trench, using a grout tremie pipe to similar method approved by the KDH&E.

E. Abandoned oil field water supply wells. A water well drilled at an oil or gas drilling site to supply water for drilling activities shall be considered an abandoned well immediately after the termination of the oil or gas drilling operations. The person or persons, corporation or partnership in charge of the drilling of the oil or gas well shall be responsible for plugging the abandoned water well, in accordance with K.A.R. 28-30-7 (a), (b), and (c), within thirty (30) calendar days after the termination of oil or gas drilling operations. Responsibility for the water well may be conveyed back to the landowner in lieu of abandoning and plugging the well, but the well must conform to the requirements for active or inactive status. The transfer must be made through a legal document, approved by KDH&E, advising the landowner of the landowner's

responsibilities and obligations to properly maintain the well, including the proper plugging of the well when it is abandoned and no longer needed for water production activities. If a transfer is to be made, the oil or gas drilling company shall provide the KDH&E with a copy of the transfer document within thirty (30) calendar days after the termination of oil or gas drilling operations. Within thirty (30) calendar days of the effective date of the transfer of the well the landowner shall notify the KDH&E of the intended use and whether the well is of active status or inactive status in accordance with K.A.R. 28-30-7 (f).

F. Inactive status. Landowners may obtain the KDH&E's written approval to maintain wells in an inactive status rather than being plugged if the landowner can present evidence to KDH&E as to the condition of the well and as to the landowner's intent to use the well in the future. As evidence of intentions, the owner shall be responsible for properly maintaining the well in such a way that:

1. The well and the annular space between the hole and the casing shall have no defects that will permit the entrance of surface water or vertical movement of subsurface water into the well;

2. The well is clearly marked and is not a safety hazard;

3. The top of the well is securely capped in a watertight manner and is adequately maintained in such a manner as to prevent easy entry by other than the landowner;

4. The area surrounding the well shall be protected from any potential sources of contamination within a one hundred (100) foot radius;

5. If the pump, motor or both, has or have been removed for repair, replacement, etc., the well shall be maintained to prevent injury to people and to prevent the entrance of any contaminant or other foreign material;

6. The well shall not be used for disposal or injection of trash, garbage, sewage, waste water or storm runoff; and

7. The well shall be easily accessible to routine maintenance and periodic inspection.

The landowner shall notify the Agency of any change in the status of the well. All inactive wells found not in accordance with the criteria listed in lines one through seven above shall be considered to be abandoned and shall be plugged by the landowner in accordance with K.A.R. 28-30-7 (a) through(c).

ATTACHMENT D

WATER WELL DISINFECTION FOR WELLS CONSTRUCTED OR RECONSTRUCTED FOR HUMAN CONSUMPTION OR FOOD PROCESSING

A. Gravel for gravel-packed wells shall be disinfected by immersing the gravel in a chlorine solution containing not less than two hundred (200) milligrams per liter, (mg/1), of available chlorine before it is placed in the wells annular space.

B. Constructed or reconstructed wells shall be disinfected by adding sufficient hypochlorite solution to them to produce a concentration of not less than one hundred (100) mg/1 of available chlorine when mixed with the water in the well.

C. The pump, casing, screen and pump column shall be washed down with a two hundred (200) mg/1 available chlorine solution.

D. All persons constructing, reconstructing or treating a water well and removing the pump or pump column, replacing a pump, or otherwise performing an activity which has potential for contaminating or polluting the ground water supply shall be responsible for adequate disinfection of the well, well systems and appurtenances thereto.