

Homeowner's Guide to Permitted Types of On-Site Sewage Disposal Systems within Douglas County, Kansas

Conventional Septic Tank-Lateral Field Systems

The most common type of septic system consists of a single 1000-gallon septic tank and a series of lateral-field trenches. In Douglas County, lateral trenches must be at least 36" wide and 27" to 39" deep. Conventional trenches are constructed of perforated PVC piping laid horizontally within a 15" deep bed of washed (dust-free) lateral rock. A newer type of construction consists of vaulted plastic chambers connected together for the length of the trench. Both these systems contain and distribute the wastewater until it is absorbed into the soil, and are acceptable in Douglas County.

The size of the lateral field depends upon the number of bedrooms and type of soil the system will be installed in. Systems installed in clay soils with slow percolation rates are required to be approximately 50% larger than those installed in soils which percolate more quickly. Conventional below-ground systems may not be used in areas where underground rock layers or high groundwater tables may interfere with their performance.

Properties deeded after October 10, 1997, are required to have at least 3 acres of land if a public water supply is provided, or 5 acres if a non-public water supply (private water well) is used, to obtain a septic system permit in Douglas County.

Lagoon System

Lagoon systems contain and evaporate wastewater in a "pond" rather than underground. Lagoons may be the most appropriate systems for larger households and those located in areas of slow-percolation soils. Lagoons must be fenced, and usually require more maintenance (mowing, weeding, etc.) than is needed for conventional septic systems.

Properties deeded after October 10, 1997, are required to have at least 10 acres of land to obtain a lagoon permit in Douglas County.

Alternative Systems

If a site is unsuitable for either a conventional septic system or a lagoon, an alternative system may be used. Wisconsin Mounds (above-ground systems) or sand filter systems (utilizing constructed filtration units to reduce the lateral field area required) may be used in soils containing substantial amounts of rock. Wisconsin Mounds may also be used in areas with high groundwater tables. Both these systems have been used extensively in the United States. Both require a pumping system and are usually more expensive to construct and operate than conventional systems.

Installer License Required in Douglas County

No person may install, construct, repair, or alter an on-site sewage management system in Douglas County without having first obtained an annual Installer License from the Health Department.

Please call the Health Department to arrange a site evaluation if you have questions regarding which type of system(s) may be appropriate for your site. There is a consultation fee for the site evaluation.