



SOUTH DAKOTA

Mr. Scott Hipple, Environmental Project Scientist or

Mr. Patrick Snyder

Environmental Senior Scientist

South Dakota Department of Environment and Natural Resources

523 East Capitol Ave.

Pierre, **South Dakota** 57501

(605) 773-3351

(605) 773-6035 (fax)

scott.hipple@state.sd.us

patrick.snyder@state.sd.us

<http://legis.state.sd.us/rules/rules/7453.htm#74:53:01>

Individual and Small On-Site Wastewater Systems

Chapter 74:53:01

April 30, 1997

Onsite regulations for South Dakota were last amended in April 1997. There are no plans to update the current regulations prior to May 31, 2004. All rules and regulations apply statewide and can become more stringent at the local level without the states approval.

Those technologies approved for onsite wastewater treatment and disposal include:

1. A conventional system consisting of a septic tank with a soil absorption system;
2. An aerobic treatment unit utilizing a sedimentation process in conjunction with a soil absorption system;
3. A septic tank with an evapotranspiration, an evapotranspiration-absorption, or a mound system;
4. A holding tank;
5. A septic tank with a graywater system; or
6. Stabilization ponds, if plans and specifications are prepared, submitted, and approved in accordance with chapter 74:53:03.

Experimental systems may be installed provided plans and specifications are submitted to this office for review and approval prior to installation. These are reviewed on a case-by-case basis.

Drainfield area/size reduction is allowed by the State Code, depending on the technology. It is based on increased surface area for treatment under the distribution pipe and storage

capacity. The required bottom area may be reduced by the following percentages for trenches only: 20 percent for 12 inches or more but less than 18 inches of fill material below the distribution pipe; 34 percent for 18 inches of fill material below the distribution pipe. A 20% reduction is allowed for chambered systems but the square footage used is based on the width of the bottom of the chambered unit.

For ongoing onsite wastewater demonstration, research, or testing projects in the state contact Mr. Hipple (above).

South Dakota Code does recognize management programs/contracts or districts to monitor and maintain onsite or individual liquid waste systems. Individual homeowners can not be required to have such monitoring of maintenance so mechanical treatment systems are not allowed. Septic systems exceeding 7,500 gpd or serve a cluster of homes or development can be required to have maintenance/management contracts.

No funding program exists to assist homeowners either replacing a failing system or installing a new one, and there are no plans to develop such a mechanism.

According to South Dakota State Code 74:53:01:12, wastewater is not allowed to surface on ground or enter State waters. Exception: No person may allow wastewater from an onsite system to be deposited upon the ground surface, nor may any person operate an onsite wastewater system which allows wastewater to surface upon the ground or enter any waters of the State. Graywater systems are exempt from this requirement in locations where they will not create a public nuisance or enter any waters of the State. Lack of proper maintenance and under-designed systems are cited as the most common reasons for system failure.

If a system is considered to be failing or to have failed, a certified installer needs to be contacted and the existing system evaluated. If it cannot be repaired, then it must be replaced.

There is no funding or financing option for individual homeowners for the repair, replacement, or new construction of onsite wastewater treatment systems.

The state does not have a pre-sale inspection protocol for onsite wastewater systems during property transfers. Neither are regular inspections required for investigating the performance and operation of onsite systems after initial construction. If the homeowner files a complaint with the State, an inspection will be conducted by an employee of the Department of Environment and Natural Resources, at no charge. Several counties have their own inspector. Otherwise, the homeowner would need to hire a company to inspect the system. All inspectors are required to be certified. They must take a written test provided by the state and receive a 70% or better.

Several counties have site evaluation requirements prior to installation but not at the state level. Percolation tests and soil characterization tests are required by some of these counties as part of the site evaluation.

The state does not issue permits for construction, repair of existing system, or for the upgrade or modification of onsite wastewater systems, nor are different permits issued for alternative/experimental/innovative systems. However, those systems must all be submitted to South Dakota Department of Environment and Natural Resources for review and approval.

There are no programs that offer homeowners insurance policies for their onsite treatment systems.

The State does not require the use of septic tank effluent filters for onsite wastewater water treatment systems.

South Dakota State Code 74:53:01:16 describes minimum lot size requirements thus: “A water-carriage wastewater system may not be installed or operated on a lot which is smaller than 20,000 square feet in surface area. A water-carriage wastewater system may not be installed or operated on a lot which is smaller than 43,560 square feet (1 acre) when potable water is supplied by a private water supply system located on the lot. A water-carriage wastewater treatment system may be installed and operated on a lot which is 20,000 square feet in surface area or larger if the requirements of §74:53:01:19 are met, and the premises are supplied by a public water supply system, a private water supply system not located on the lot, or by hauling and storage of potable water in a cistern. The requirements of this section do not apply if wastewater is emptied into a holding tank or an unconventional system is used.

Further, §74:53:01:05 gives requirements for existing subdivisions and developments exempted from lot size requirements – Proviso. Housing subdivisions and housing developments platted before February 28, 1975, are exempt from the lot size requirements of §74:53:01:16 provided compliance with other provisions of this chapter can be achieved.

Minimum lot size allowed for the placement and use of an onsite wastewater treatment system with public water is 20,000 sq. ft., and 1 acre without public water.

Minimum setback/separation distances include:

	<u>Septic Tank</u>	<u>Drainfield</u>
• Dwelling/structure -	10'	20'
• Well-Less than 100' in depth -	75'	150'
• Well-Greater than 100' in depth-	50'	100'
• Surface water -	50'	100'
• Property lines -	10'	10'
• Seasonal high water table/limiting layer -	50'	100'
• Wetlands -	50'	100'

Information relevant to municipal wastewater regulations may be obtained by contacting:

Mr. Kent R. Woodmansey, P.E,
Natural Resource Engineering Director
(605) 773-3351
kent.woodmansey@state.sd.us