



October 1, 2004

PREVENT SEPTIC PROBLEMS

Rural homeowners on farms and acreages accept the responsibility for home wastewater treatment as part of independent living status. Whether you are buying a home, building a new home or have lived there for years, maintenance is a critical part of having a legal, functioning, non-polluting waste management system.

In our area, the soils are silty clay loam soils. A common soil type is a Crete Silty Clay or Crete Silty Clay Loam. These soil types are quite slow in water infiltration rate. That is why many septic system drain fields have failed in Saline County plus times have changed since septic systems were originally built in many of our older farm homes. This is why many of our farm homes have opened the ends for discharge. This is not legal and should be remedied as soon as possible. Many people do not understand they have an illegal waste system until a home is sold or a tornado hits. To qualify for a low interest Federal Loan, a proper waste system needs to be in place.

Following are some of the maintenance tips that will help septic system owners reduce system failures.

1. Have the septic tank pumped by a certified pumper at least once every three years. This will keep solids from moving out of the tank into lateral lines and reducing seepage rates even further.
2. Control water use in the home. All waste water has to pass through the system. Seven minute showers produce one-half the wastewater of fourteen minute showers and also save on water heating costs.
3. Don't flush cigarettes (unless this is the final pack), diapers, brown paper toweling or other products which will increase the solids buildup dramatically.
4. Use the garbage disposal but don't overload the system with large batches of peels, rinds, husks, etc.
5. Keep hazardous materials like paint, petroleum products, pesticides, medications, and unused cleaning products out of the system.

Make sure the drain field area has a good grass cover. Divert water from roofs and other surface drainage areas away from the drain field area. Do not add soil depth over the drain field area. Avoid planting trees in the immediate drain field area. Fall time tends to be the time where tree roots can plug up old septic systems if trees are too close. Avoid using this area for driveways or field roads.

Using a wastewater lagoon rather than a septic tank and drain field or only a drain field is a good plan in our area. The key to good operation and maintenance is in the proper construction and design by a certified operator. Lagoon operating depths should be 2 to 5 feet. Watch the monitoring stick and adjust levels as needed. Making sure the contractor properly seals the bed of the lagoon and correctly installs a marked depth gauge is vital. It is nice to have some method to



add water to the lagoon from roofs or other sources other than the well. This will help with the initial filling and adding extra water to keep the proper depth when water use is low or if the well is marginal. Vegetation, color and water level are the keys to lagoon maintenance. Maintain good grass cover on the lagoon slopes. Do not plant shrubs, trees or allow weeds to grow on the bank which slow down air movement across the lagoon surface. Lagoons should be a bright rich green color. Yellowish, tan, brown, red, gray, or black are not good colors nor do they smell good!

There is an excellent website with information on design and maintenance of wastewater treatment systems at <http://wastewater.unl.edu>. For further information, contact Randy Pryor by calling (402) 821-2151 or e-mail rpryor1@unl.edu.

Randy Pryor, Extension Educator
University of Nebraska-Lincoln Extension in Saline County
306 West 3rd Street, Wilber, NE 68465
Phone (402) 821-2151 • Fax (402) 821-3398 • e-mail: randy.pryor@unl.edu