



## **Saskatchewan Onsite Wastewater Management Association**

### **Installing, Maintaining, or Inspecting a Septic System?**

#### **Important Information for Homeowners**

A septic system is an important part of your rural homes infrastructure. Systems are not inexpensive to have installed and should they fail, may cause a health or environmental hazard. Below are some tips for homeowners who either need a septic system, are having a septic system maintained, or are having an inspection for a real estate transaction.

#### **Septic System Design and Installation**

The design of the most efficient and cost-effective onsite wastewater treatment system is fundamental to ensure performance, longevity, and protection of the environment. The design of the wastewater system for your property requires site visits, soil testing, assessment of building occupancy and use, and the creation of a site plan. Your designer or designer/installer must:

1. Make a site drawing of your property and evaluate the area available for a wastewater system.
2. In the site drawing, the installer/planner/designer will show the location of other utilities including your well and the location of any public water adjacent to your property.
3. The designer will evaluate the soil conditions of your property to determine its ability to accept wastewater. A minimum of two soil test pits must be assessed for soil structure, consistence and other soil characteristics. A soil sample from the most limiting and the restricting horizons must be sent to the lab for texture analysis. Two samples must be sent from each of the test pits assessed. The quality of the domestic water supply will also be considered since sodium, iron and other components of well water are a factor in system design.
4. The designer will ask you to supply information on the size and use of the structure in existence or to be built. In the case of a residence, the number of bedrooms and the expected occupancy will be a factor in design. If the home has jetted tubs, large appliances and/ or will be used for a home-based business, the capacity to accept the additional wastewater will be designed into the system. This will help the designer establish a peak daily flow the system must be able to handle. The flow rate must meet or exceed the minimum standard specified by the provincial regulatory framework.
5. After completing the tasks above, the designer will recommend one or more systems suitable for your property based on the flow rate, the land area available, the soil conditions and the presence of adjacent public water.
6. The installer or designer must submit a system design that meets or exceeds the requirements of the provincial regulations in order to obtain a permit from the regulatory authority prior to construction.
7. Upon completion of the installation, the system must be inspected and passed by the regulatory authority prior to use.

**Always use a Certified/Qualified Contractor**

## Maintaining a Septic System

A key reason to maintain your wastewater treatment system is to save money! Failing systems are expensive to repair or replace, and poor maintenance is often the culprit.

1. **Have Your Tank Pumped** – Pumping will be needed on a regular basis under normal use. When the tank is pumped, be present to observe the level of sludge and scum so you can adjust your cleaning schedule. Sludge should not rise higher than one-third the depth of your tank.
2. **Have the tank components checked**— Does the tank appear to be in good condition? Does the filter need to be cleaned? Is the pump functioning normally? Is the high water alarm working?
3. **Test the squirt height**—If you have a pressure distribution system, your squirt height can be tested by pumping the equivalent of one dose (50—100 gallons) and measuring the squirt height from the cleanouts.
4. **Have Your Field or Mound Inspected**— Walk the field or mound area. Is the soil spongy or saturated? Are there signs of ponding water or leaching?

Your maintenance provider should provide you with a report outlining what was checked and its condition. Any recommendations for repair should be highlighted and addressed as soon as possible.

**Never allow anyone to pump huge volumes of water (>100 gal) through your septic system to see if it is working! Your septic system was designed to accept and treat a certain amount of wastewater each day. Flushing huge volumes of water through a system to 'test' it is unnecessary and can cause your system to fail.**

## Septic System Inspection

Septic systems may be inspected for a variety of reasons: to ensure compliance with regulations, to check functionality, or to assess a system prior to a property sale. A septic system inspection is comprised of similar activities as a maintenance assessment (see above). During an inspection:

1. Check the tank and its components—tank structural condition, effluent filter, pump, high water alarm, etc.
2. Ensure all electrical components are functioning as intended—pump, dose panel, alarm.
3. Assess the condition of the field or mound—is the soil spongy, or waterlogged? Are there signs of surfacing effluent or ponding?
4. Review the maintenance record of the current homeowner. Has the system been well –maintained? When was it inspected last. What pumping or maintenance has taken place and when?
5. When was the system originally installed? Is there a permit on file?
6. Are there design or other documents available for review?

The inspector should provide you with an inspection report detailing what system components were inspected, their condition and whether any repairs or replacements are recommended.



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