

STANDARD ON-SITE SEPTIC SYSTEMS

General

Wastewater exiting the residence is directed into the primary compartment of the septic tank for primary treatment and clarification of solids. Effluent leaving the primary compartment enters the secondary compartment. The effluent then flows by gravity to the disposal field for final disposal.

Disposal Trench Configuration

The disposal trenches are constructed on contour, parallel to the slope, and are set about ten feet apart. The trenches are constructed by excavation with a backhoe and filling to a pre-determined depth with clean, washed 3/4" crushed rock. Within the gravel is placed a 4" diameter perforated pipe, through which the wastewater flows.

A layer of earth backfill has been mounded over the entire disposal field so that the earth backfill extends a minimum of 12" deep over the filter fabric located in the trenches.

Inspection Ports

A number of inspections ports are installed into the system to allow for observation of water levels. One inspection port is located in each end of the disposal trenches. This port allows a visual observation of the bottom of the trench and should reveal any ponding effluent.

On-Site Septic System Inspection

Septic Tank

The septic tank should be inspected by the homeowner or a professional septic tank pumping contractor approximately once per year for sludge accumulation and should be pumped as necessary to prevent sludge from entering the disposal trenches. The tank should be pumped when the sludge accumulates to within 12-18" of the bottom of the inlet structure (TEE). The septic tank will require less frequent pumping if the amount of solid material introduced into the septic tank is minimized.

Solid materials such as food scraps and vegetable trimmings should be disposed in the garbage or a compost pile. Grease should not be poured down the drain, but rather collected and disposed in the garbage. Paper products such as disposable diapers, kleenex, sanitary napkins and paper towels are also harmful and should be disposed in the garbage. Garbage disposal units are strongly discouraged.

For more information concerning septic tanks and pumping procedures, contact the designer or a qualified septic tank pumping contractor. Failure to pump the tank when necessary may result in clogging and/or premature failure of the disposal trenches.

Inspection Pipe and Monitoring Well Observations

The system's monitoring wells (two wells, located down-slope from the disposal field) and inspection pipes (located within each of the disposal trenches) should be inspected at least twice per year by the homeowner, once during February or March and once during August or September. During each inspection the date and depth of water should be noted.

Signs of septic system failure include discharge of sewage to the ground surface and saturated upper soils horizons during periods of dry weather. If the system is clearly failing, the designer and the local building department should be notified immediately.

Water levels in the inspection pipes or monitoring wells which are very near the ground surface may indicate potential problems, but do not alone constitute failure. In such cases, the system should be monitored more frequently for clear signs of failure, perhaps once per week, until a clear pattern is developed.

Site Improvement Restrictions

The following are some common site improvements which may have a potentially negative impact on the proper operation of the septic system (tank and disposal field):

- ★ Any grading within the area containing the septic system, or the area down-slope of the disposal field
- ★ Operating or parking vehicles and/or heavy equipment on any portion of the septic system
- ★ Livestock (cattle, horses, swine, llamas, etc.) on the disposal field or the area immediately down-slope from the disposal field
- ★ Diversion of surface runoff (including house downspouts) onto the disposal field
- ★ Construction of any structures (including above-ground pools) or storage facilities on the disposal area
- ★ Paving with concrete or asphalt