

## SECTION 15

### W E L L & S E P T I C

This highlights only some of the most commonly requested information. It is not an attempt to cover exhaustively all issues which may affect a project. Other handouts, and District Environmental Health Specialists, are available to assist applicants with their projects. A free booklet is available that explains septic systems, their functions and maintenance.

**Wells** (see Figure 15 A, page 15.3)

#### **Permits**

Permits are required to drill, abandon, or deepen wells, and only C-57 well drilling contractors may take out such permits.

#### **Water Scarce Areas**

Maps are available for review at the Permit and Resource Management Department, and display four zones (1-4) of ground water availability. Zone #4 is a low water yield area and requires an 8-12hour well pump test during the period of July 15 - October 1. The test must be performed by a licensed well or pump contractor or Registered Civil Engineer and is required prior to a building permit issuance. At least 1 gallon per minute must be demonstrated for each dwelling unit. The test period may be extended for some wells if dry weather conditions extend beyond October 1. For springs, the test is only run long enough to demonstrate a continuous gallon-per-minute flow. No spring testing is allowed beyond October 1.

#### **Setbacks**

Wells must be at least 5' from property lines, 100' from septic systems, and 25'-50' respectively from approved sewage waste lines or mains and 150' from seepage pits or cesspools.

**Septic Systems** (see Figures 15 B & C, page 15.3)

#### **Permits**

Permits are required to install, repair, or replace septic tanks, leach fields, and related sewage disposal components. Homeowners may design and install their own standard, gravity septic systems. Pump and non-standard systems require a specific license (Civil Engineer or Registered Environmental Health Specialist) for design.

For most homeowners, licensed design and installation are recommended.

## **The Process**

For new homes and substantial remodeling or addition, a soils analysis is needed. A “pre-perc” evaluation is done through review of soil profiles dug in the proposed leach field area by a licensed consultant. If these appear suitable, percolation (perc) tests are completed to determine the size of the system needed. Poor soils require a larger disposal field; well drained soils allow a smaller disposal field. Satisfactory perc tests allow a septic system design to be drawn. The design may be approved by itself or with a permit to install the system. Designs must be a 1:20 scale, and include structures, driveways, wells, property lines, easements, septic tanks and leach fields, creeks, drainage ways, ponds and flood zones. A handout is available for plot plan requirements.

## **Wet Weather Testing**

There are two types of wet weather testing: ground water tests and wet weather percs. Groundwater (depth) tests are required on all parcels where the slope is less than 5%, and where ground water is suspected to be a problem. Wet weather perc tests are required where the soils appear expansive (high clay and/or silt content). Soil hydrometer tests may be used to determine the silt and clay content of a soil sample, and other lab tests may be done to determine the expansiveness of the soil and avoid the need for a wet weather perc test.

## **Remodels and Additions**

For substantial remodels and additions, a Well & Septic Section clearance is required. A policy is available explaining what levels of remodeling trigger the need for septic system upgrade or replacement. No remodeling can be approved when a living unit is served by a cesspool (one sewage disposal box by itself). Prior to demolition of a home, the owner is advised to consult with the Well & Septic Division.

## **Gray Water Systems**

As of January 1, 1996, subsurface gray water systems are approved for use with a permit. This system should be discussed with Well & Septic Division staff.

## **Septic System Repairs**

If a septic system fails and the home is within a sewer district, and sewer is within 200', hookup to the public sewer is required. The septic tank must be abandoned under permit. If sewer is not available, well and septic staff will work with the owner to provide the best repair or replacement, taking into account site constraints and economics.

## **General Information**

District Environmental Health Specialists of the Well & Septic Section are available by appointment only between 7:30a.m. - 9:00 a.m., and a general counter representative is available most days from 10:00a.m. - 4:00 p.m, except on Fridays when PRMD is closed to the public.

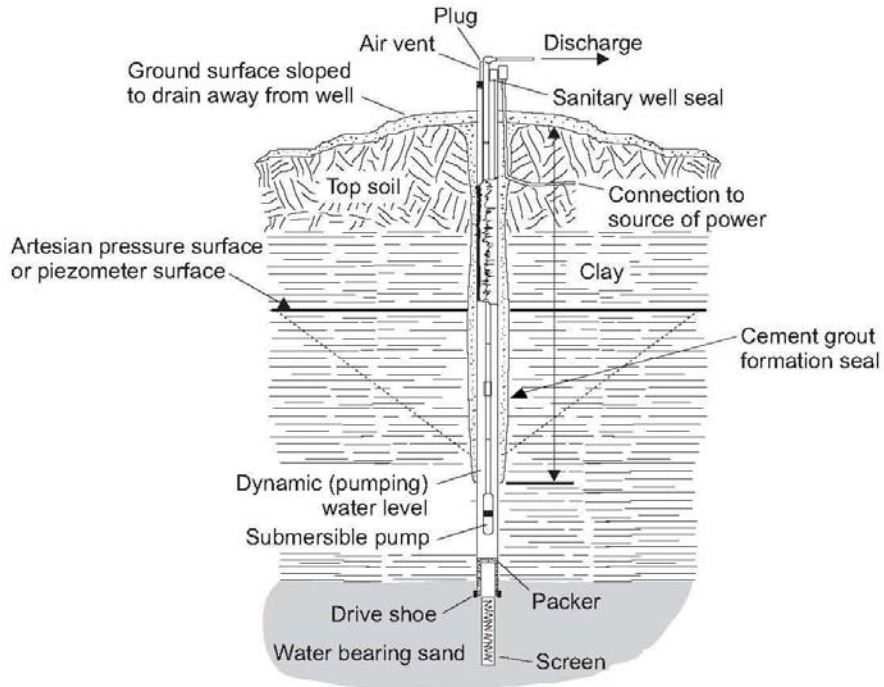


Figure 15A  
**Drilled Well With Submersible Pump**

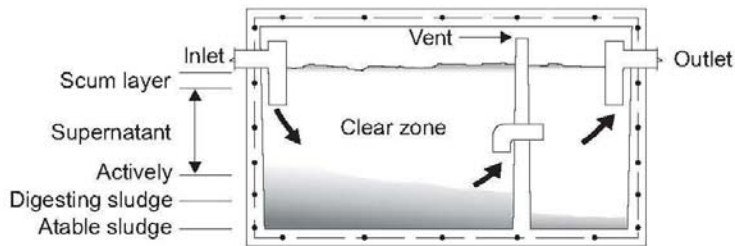


Figure 15B  
**Septic Tank Sideview**

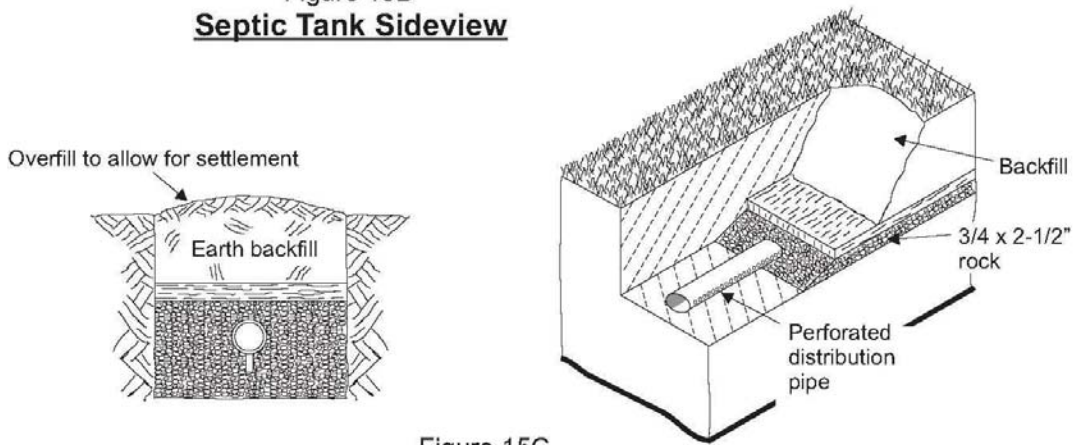


Figure 15C  
**Typical Trench-type Soil Absorption System**