

Septic Tank Summary

The following summary of septic tank rules is taken from Missoula County Regulation 1 and from the Montana Department of Health and Environmental Sciences Circulary WQB 6: Standards for Individual Sewage Systems. The Missoula City-County Health Department does enforce these requirements. Some questions found on the Septic Installer Certification Examination have been taken from this summary.

General

1. All liquid waste and wash water must discharge into a septic tank.
2. Septic tanks must be located using the minimum separation guidelines found in Regulation 1, Section V (C) (1), as illustrated in the following table:

FROM:	TO:	SEPTIC TANK	ABSORPTION SYSTEM
Foundation Wall		10	10
Property Line		10	10
Stream, Lake, or Irrigation Ditch		50	100
Water Lines		10	10
Well		50	100
100-year Floodplain or Flood-prone Area		10	100

Table 1. Minimum Separations (Distances in Feet).

Construction

1. Septic tanks must be made of reinforced, corrosive-resistant concrete or of other material specifically approved by the Health department. Empty tanks must be capable of withstanding loads created by six feet of burial.

In general, septic tanks will have 3-inch thick walls and bottoms and 4-inch thick tops and will be reinforced with 3/8-inch rebar.

2. Septic tanks must be sized to retain wastewater for a minimum of 48 hours.

3. Tanks must provide an air space having a volume not less than ten percent of their liquid capacity. Air space is computed from the bottom of the outlet pipe.
4. Inlets and outlets for each tank must be equipped with either baffles or a sanitary T (refer to diagrams following this summary). Either baffles or sanitary T's must meet the following criteria:
 - A. Inlet baffles must extend to a minimum of three inches above and 6 inches below the bottom of the inlet pipe.
 - B. Outlet baffles must extend above the bottom of the outlet pipe to a distance equivalent to at least 10% of the liquid depth of the tank and below the bottom of the outlet pipe to a distance equivalent to 40% of the liquid depth of the tank.
 - C. An air gap of at least 1 inch must be left between the top of each baffle and the inside top of the tank.
 - D. Baffles must be located six (6) to eight (8) inches from the inside surface of the tank.
5. Access ports are required for each compartment in the septic tank and must be covered with a lifting eye.
6. An 8-inch diameter riser must lead from one access port to the elevation of the finished grade and must be located in such a way as to facilitate tank maintenance and inspection.
7. Multi-compartment tanks (using internal walls) must follow the specifications in WQB 6.

Installation

1. The septic tank must be set on undisturbed ground or properly bedded with sand to prevent settling of the tank.
2. The tank must be installed level.
3. Pipe entering the tank (inlet) must be Schedule 40 and a minimum of 4 inches inside diameter. Pipe exiting the tank must be Schedule 40 and a minimum of 3 inches inside diameter.
4. Tank inlets and outlets must be sealed to prevent leaking.
5. After installation, septic tanks must be free from fractures or cracks passing through the floor or walls.

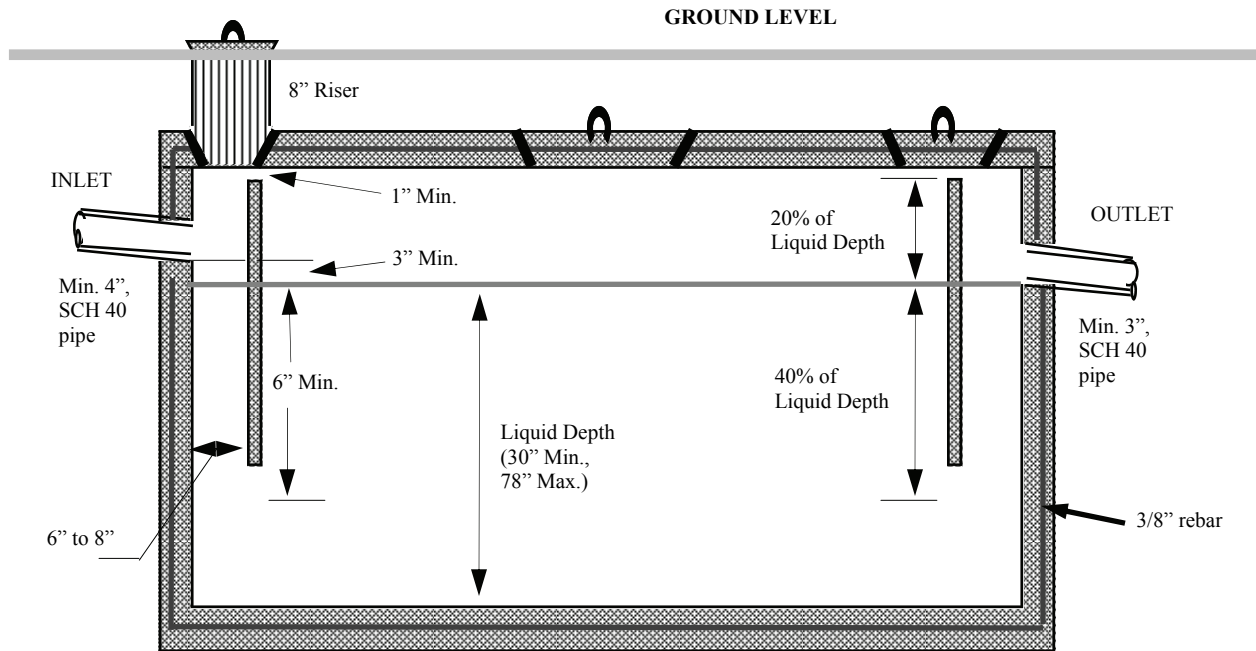


Figure 1: Cross-section of a Septic Tank with Baffles

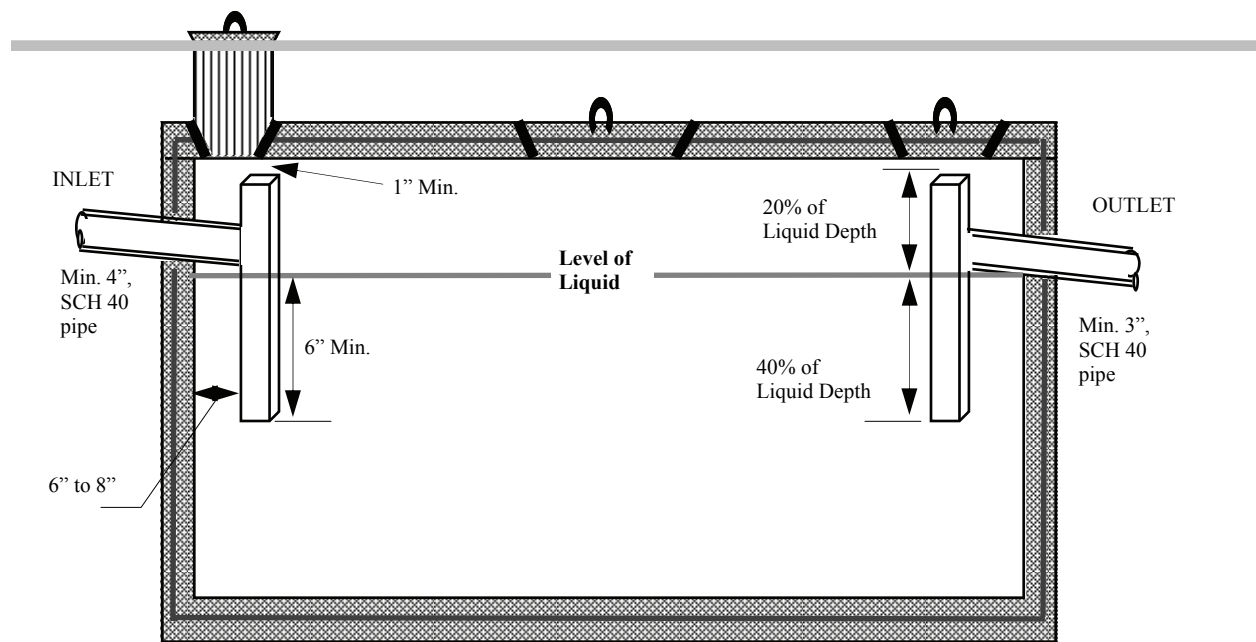


Figure 2: Cross-section of a Septic Tank with Sanitary T's