



### STEP THREE : Measure Sludge Level

This process is to determine the distance from the bottom of the outlet baffle or tee to the top of the sludge layer.

1. Wrap a white rag or old towel around the bottom three feet of a stick at least six feet long, and fasten it with tape or string.
2. Carefully lower the stick to the bottom of the first compartment. To avoid pushing it through the scum layer, lower the stick behind the outlet baffle or through the outlet tee.
3. Hold the stick in the tank for a few minutes to allow sludge particles to adhere to the towel. Mark the stick at the reference point to indicate the bottom of the tank.
4. Remove the stick carefully and note a distinct dark stain on the towel representing the sludge layer. Lay the stick beside the scum stick. Line up the top pencil marks.
5. Measure the distance from the bottom of the scum stick to the top of the dark stain on the sludge stick.

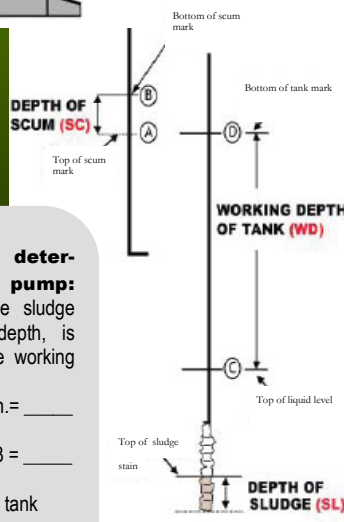
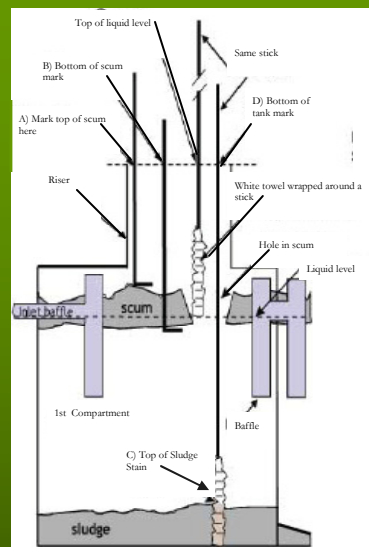
**If the distance is 12 inches or less, the tank must be pumped.**

Repeat steps one through three for each chamber of each tank. If the chamber has a pump in it and any solids are observed, pumping is required.

**Health Warning:** Septic systems contain many disease causing organisms. Be sure to properly sanitize any tools or contaminated areas and be sure to wear disposable gloves.

**Safety Warning:** Septic tanks may contain gases that are potentially hazardous, flammable, and deadly. Do not enter a septic tank. Do not stick your head into the opening of a septic tank. Always have someone nearby that can go for help in the event of an emergency.

### STICK TEST DIAGRAMS



**Another method to determine when to pump:**

Pump the tank when the sludge depth, plus the scum depth, is greater than one-third of the working depth of the tank:

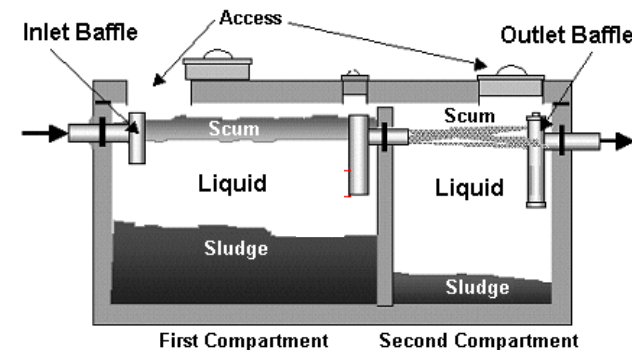
A)  $SC \text{ in.} + SL \text{ in.} = \text{_____}$

(b)  $WD \text{ divided by } 3 = \text{_____}$

If (a) is greater than (b), the tank needs pumping.

For comments or questions, please contact:  
 Department of Building and Planning  
 Environmental Health Unit  
 TEL: (360) 577-3052  
 FAX: (360) 414-5550  
<http://www.co.cowlitz.wa.us/buildplan/default.htm>

**IS IT TIME TO PUMP?  
 A HOMEOWNER'S  
 GUIDE TO SEPTIC TANK  
 INSPECTION**



Lack of septic tank maintenance can cause sewage to back up into your house or solids to overflow to the drainfield. Once solids leave the outlet of the septic tank, they can quickly clog a drainfield to the point where a new one may be required. The inspection of the sludge and scum level in a septic tank is the only way to determine when the tank needs to be pumped. This is a step by step guide to assist homeowners in inspecting the tank condition and determining when pumping the tank is necessary.

### MATERIALS REQUIRED:

- |   |  |
|---|--|
| * Two 10-foot PVC pipes                 | * Pencil or waterproof marker  |
| * Four end caps                         | * String or duct tape  |
| * One 90 elbow                          | * Rubber gloves  |
| * PVC cement (suitable for use in rain) | * Disinfecting solution ( 1/2 C bleach per gallon of water in a bucket |
| * Two threaded adapters                 | * Plastic bag for towel disposal                                       |
| * One coupler                           |  |
| * White rag or towel                    |  |

All PVC and fittings are 1/2 inch Schedule 40 PVC plastic

### LOCATING THE SEPTIC TANK:



Identifying the septic tank location is the first step in septic tank maintenance. Records, or As-Built drawings can assist in locating existing tanks. Check with the Building and Planning Department to see if historical records are available. If no record exists, probing with a steel rod gently tapped into the ground, starting five feet from where the sanitary sewer leaves the house, should help you to locate it.

### STEP ONE: Baffle Inspection

Once tank location is positively determined, the lids must be uncovered and removed. Some tanks may have "risers" to grade, making tank and lid locations more apparent. Risers can be installed on existing tanks allowing for easier maintenance.



With the lids removed, inspect the inlet, outlet and crossover baffles to ensure they are present and not severely corroded. If the baffles are concrete and molded into the inside of the tank, the baffles should have venting holes that are unobstructed.

### STEP TWO: Measure the Scum Level



This process is to determine the distance between the bottom of the scum layer and the bottom of the outlet baffle or tee.

1. Establish a convenient reference point, such as a board laid across the hole at the top of the holding tank. Attach a 6" board at 90 degrees to the bottom of a stick at least 6 feet long forming an extended "L".

### STEP TWO Continued...

2. At the outlet end of your tank's compartment, carefully push the stick through the scum layer to find the bottom of the baffle or tee. Mark your stick at the reference point to indicate the bottom of the baffle or tee.
3. Raise the stick slowly until you feel or see the stick contact the bottom of the scum layer. Mark your stick again at this reference point to indicate the bottom of the scum.

If the two pencil marks are three inches or less apart, the tank needs to be pumped.

If the top of the scum is within one inch of the top of the outlet baffle, the tank needs to be pumped.

4. Lay the stick aside for comparison with the sludge level stick.

