

Galveston County Health District

Environmental and Consumer Health Division 1205 Oak Street, La Marque, Texas 77568 (409) 938-2300

HOMEOWNER'S SEPTIC TANK SYSTEM GUIDE AND RECORD KEEPING FOLDER

SANITARY PERMIT: ISSUED TO:______DATE ISSUED:_____ LEGAL DESCRIPTION: **SYSTEM DESCRIPTION:** ☐ AT-GRADE ☐ LEACHING CHAMBERS ☐ OTHER: DRAINFIELD DIMENSIONS: ☐ OUTLET FILTER ☐ AEROBIC TREATMENT UNIT ☐ SIPHON ACCESSORIES: ☐ SAND FILTER ☐ PUMP ☐ DIVERSION VALVE □ D-BOX OTHER: INSTALLING CONTRACTOR: ADDRESS: TELEPHONE:_____ALTERNATE PHONE:_____ SEPTIC TANK PUMPER:_____ ADDRESS:_____ TELEPHONE:______ ALTERNATE PHONE:_____



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SYSTEM MAINTENANCE RECORD

DATE	DESCRIPTION	DATE	DESCRIPTION

YOUR ONSITE WASTEWATER TREATMENT SYSTEM

So you are an owner and operator of a septic tank system. You should be proud! Your system is designed to be safe for the environment and to protect public health. A properly installed and operated septic tank system treats your waste water and returns it to the ground water to preserve and protect our ground water resource. Successfully used for over 100 years, nearly one-third of the population of the United States is served by this method of wastewater treatment!

Sketch Your System Here

SYSTEM DESCRIPTION

A septic system consists of a **septic tank**, a **distribution box** and a **drainfield**, all connected by pipes, called **conveyance lines** (see diagram on opposite page). Your septic system treats your household wastewater by temporarily holding it in the **septic tank** where heavy solids and lighter scum are allowed to separate from the wastewater. This separation process is known as **primary treatment**. The solids stored in the tank are decomposed by bacteria and later removed, along with the lighter scum, by a professional septic tank pumper.

After the partially treated wastewater leaves the tank, it flows into a **distribution box**, which separates this flow evenly into a network of **drainfield trenches**. Drainage holes at the bottom of each line allow the wastewater to drain into gravel trenches for temporary storage. The septic tank **effluent** is allowed to flow to a drainfield by gravity or is dosed by a pump or siphon. This **effluent** then slowly seeps into the subsurface soil where it is further treated and purified (**secondary treatment**). Drainfields other than the one described can be used. These include seepage pits, mounds, LPP's, at grades, and other designs. If you have any of these, check with your installer or contact Galveston County Health District (address and phone number on front of folder) for more information.

Septic System Layout

SEPTIC SYSTEM MAINTENANCE

Often overlooked or neglected is the fact that a septic system should have a regular check-up to prevent problems. The septic tank traps the solids in the wastewater and should be checked to determine whether or not it is time for it to be



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pumped out. The inspection port should be opened and the baffles (internal slabs or tees) should be checked to ensure that they have not been damaged since the last check-up (see diagram below).

Cross Section of a Septic Tank

The absorption field should be checked for sogginess or flooding, which indicates improper drainage, a clogged system, or excessive water use. The entire area containing the system should be checked for damp or soggy areas or odors, indicating a leak in the system.

A properly designed septic system will have a septic tank with sufficient space to accumulate solids for several years. When the level of solids fills too much space in the tank, the wastewater has less time to settle properly and too many solid particles flow into the absorption field. If the tank is not periodically pumped out, this will eventually clog it to the point where a new field will be needed.

TAKING CARE OF YOUR SYSTEM

How often you need to pump the solids out of your septic tank depends on three major factors. First is the size or capacity of the tank itself. If more people are living in the home than when the system was installed, or if new high water use technologies such as a hot tub or whirlpool are now in use, then the capacity may be too small. It would then be necessary to pump out the system more frequently. Too large a system should not be a problem. It simply means you have to empty the solids less often.

The number of people in the household is also related to the second factor, the flow of wastewater. Obviously, the more people, the more water flow through the system.

The third factor for determining how often you must pump the solids out of your septic tank is the volume of solids in the wastewater. If you have a garbage disposal, for example, you will have to pump out your system more frequently than persons disposing of their food wastes through other means. If the occupation of someone in the household results in their having excessively soiled clothes, a construction worker or a coal miner, for example, the washing of these kinds of clothes may also add solids to your rank at a higher rate than normal.

The table below shows how often you need to pump out your septic tank on average, given the size of the tank and the number of persons living in the household. These figures assume there is no garbage disposal unit in use. The use of a garbage disposal will increase the amount of solids in the holding tank by as much as 50 percent.

Estimated Septic Tank Pumping Frequencies in Years

(Source: Pennsylvania State University Cooperative Extension Service)

Tank size		Household size (number of people)						
(gals.)	1	2	3	4	5	6		
500	5.8	2.6	1.5	1.0	0.7	0.4		
750	9.1	4.2	2.6	1.8	1.3	1.0		
900	11.0	5.2	3.3	2.3	1.7	1.3		
1000	12.4	5.9	3.7	2.6	2.0	1.5		
1250	15.6	7.5	4.8	3.4	2.6	2.0		
1500	18.9	9.1	5.9	4.2	3.3	2.5		
1750	22.1	10.7	6.9	5.0	3.9	3.1		
2000	25.4	12.4	8.0	5.9	4.5	3.7		
2250	28.6	14.0	9.1	6.7	5.2	4.2		
2500	31.9	15.6	10.2	7.5	5.9	4.8		