

# How The Eco-Sphere Septic Tank Works

The primary function of the septic tank is to remove solids from the wastewater and provide a clarified effluent for disposal. The septic tank provides a relatively still body of water where the wastewater is retained long enough to let the solids separate by both settling and floatation. This process is called primary treatment and results in three products:

**Scum:** Substances lighter than water float to the top, where they form a layer. Aerobic bacteria work at digesting floating solids (i.e. scum).

**Sludge:** The heavier solids (e.g. soil, grit, bones, unconsumed food particles), which are denser than water and fluid in nature, settle to the bottom of the tank and forms a layer. Anaerobic bacteria decrease the volume of the sludge in the tank by consuming organic material.

**Effluent:** Effluent is the clarified wastewater left over after the scum has floated to the top and the sludge has settled to the bottom. It is the liquid between the scum and the sludge. It flows through the septic outlet and can be disposed of using one of the following methods:

## A Eco-Sphere Digester Tank

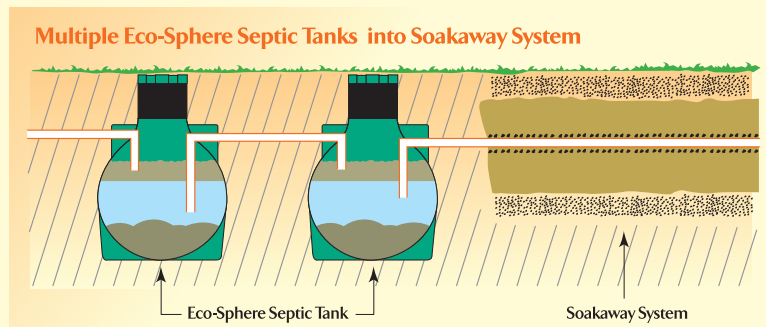
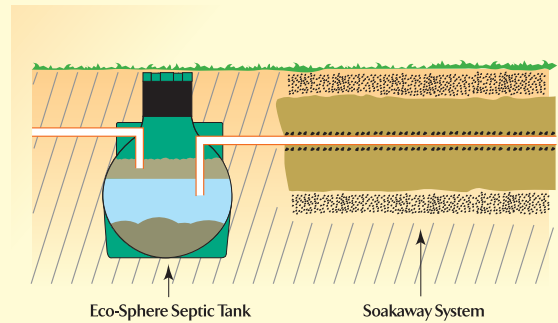
Rotoplastics has engineered an effluent disposal system which is more environmentally friendly than traditional methods. The Eco-Sphere Digester contains special components which aid in the purification of effluent. (Next page)

## B Seepage Pit (Soakaway)

An excavated area lined with boulders or concrete blocks where the effluent is temporarily stored until it gradually seeps out and infiltrates the surrounding sidewall soil.

## C Absorption Trenches

Shallow gravel-filled trenches with a perforated pipe near the top of the gravel which distributes the wastewater throughout the length of each trench.



## Capacity

Model	Volume (Gallons)	Volume (Litres)	Diameter	Height (with cover)	* Maximum No. of Users
500 G	500	1,892.5	60" (153cm)	74" (187cm)	5
800 G	800	3,028	76" (193cm)	81" (206cm)	12

\* Sized for Toilet Waste only

\* Based on a pump out period of 4 years

## Location

The site of the septic tank is usually determined by the location of major bathroom plumbing. Septic tanks should not be located within 6' ft (1.5m) of a building or property boundary. The tanks should not be located near high traffic areas where it could be subjected to excessive loads. The location should be accessible to a driveway or other acceptable route, so a sewage truck can be driven close enough to pump out the sludge and clean the tank.

## General Guidelines

- Don't flush anything down the drain that is not biodegradable - disposable diapers, condoms, feminine hygiene products, anything plastic, etc.
- Do not use any type of septic system additives/enzymes in your system. They do not work and can actually cause problems.
- Always refill the tank with water following periodic septic pumping.