SEPTIC TANK WITH ABSORPTION TRENCH

This information will be of interest if your OSMS is a septic tank with an absorption trench. This factsheet provides information about septic tanks, how they work and how absorption trenches work.

A septic tank is a watertight vessel that stores and treats wastewater i.e. waste from the toilet, shower, bath, kitchen and laundry. A septic tank is a ‘primary’ treatment system. Wastewater flows into the tank from the house, and the solid matter settles to the bottom of the tank where naturally occurring bacteria convert the material into sludge.

Fats and grease form a ‘scum layer’ on the surface of the water. This layer is a normal occurrence and helps to keep odours inside the tank. Under the scum layer is a clearer liquid (effluent) that flows from the outlet of the tank into the absorption trench, each time wastewater enters the tank.
Absorption trenches rely on the porosity of the soil to soak up treated effluent and provide a suitable environment for plants that use the water for transpiration (see separate list of suitable plants - Factsheet 11).

An absorption trench is constructed of a durable self-supporting arch or slotted PVC pipe, filled with aggregate, overlayed with geo-textile and finished with topsoil. A trench should follow the contour of the land so it is level, allowing for even distribution of effluent. Trenches are generally 300-700mm deep to avoid contact and exposure to effluent.

The location and ongoing functionality of absorption trenches is important to protect neighbours and the environment especially as water courses or groundwater nearby may be used for drinking, stock or domestic purposes.

Fruit and vegetable crops intended for human consumption are not to be planted on or within close proximity to an absorption trench. Vegetation with large or invasive root structures should not be planted too close to an absorption trench area so the integrity of the trench can be protected.

**DIAGRAM 2: TYPICAL ABSORPTION TRENCHES**

**WARNING!**

When the level of sludge exceeds 500mm from the base of your tank, you need to have your tank pumped out by a licensed contractor, as it reduces the holding capacity of the tank.