

## Disposal of digested sludge:

The digested sludge from the digestion tank contains a lot of water, and is therefore, first of all, dewatered or dried up before further disposal either by burning or dumping.

Dewatering, drying and disposal of sludge by sludge drying beds:

Drying of the digested sludge on open beds of land is quite suitable for hot countries like India. Sludge drying beds are open beds of land, 4.5 to 60 cm deep and consisting of about 30 to 45 cm thick graded layer of gravel or crushed stone varying in size from 15 cm at bottom to 1.25 cm at top, and overlain by 10 to 15 cm thick coarse sand layer.

The sewage sludge from the digestion tank is brought and spread over the top of the drying beds to a depth of about 20 to 30 cm. A portion of the moisture drains through the bed while most of it is evaporated to the atmosphere. It usually takes about two weeks to two months for drying the sludge, depending on the weather and condition of the bed.

Disposal of dewatered sludge:

The dewatered sludge obtained from mechanical devices in western countries is generally heat dried, so as to produce fertilizers. The wet sludge after mechanical dewatering is sometimes directly disposed of either in sea or in underground trenches or burnt.

Disposal by dumping into the sea:

The dewatered wet sludge may sometimes be discharged at sea from hopper barges or through outfall sewers. This method can, however be adopted only in case of cities situated on sea shores and where the direction of the normal winds are such as to take the discharged sludge in to the sea away from the shore line.

Disposal by burial in to the Trenches:

In this method, the digested sludge without dewatering is run in to trenches. When the sludge has dried to a firm state, it is covered a top with a thin layer of soil. After about a month, the land is ploughed up with powered lime and planted with crops.

Disposal by incineration:

The dewatered wet sludge produced in waste water treatment plant may also be disposed of by burning in suitably designed incinerators, when sufficient space is not available for its burial near the plant site or the sludge cannot be dried and used as manure.