

## SEWAGE DISPOSAL BY DILUTION:

Disposal by dilution is the process whereby the treated sewage or the effluent from the sewage treatment plant is discharged into a river stream, or a large body of water, such as a lake or sea. The discharged sewage in due course of time, is purified by what is known as self purification process of natural waters. The degree and amount of treatment given to raw sewage before disposing it off into the river stream in question, will definitely depend not only upon the quality of raw sewage but also upon the self purification capacity of the river stream and the intended use of its water.

### Dilution Factor:

The ratio of the quantity of the diluting water to that of the sewage is known as the Dilution Factor.

### Conditions favouring Disposal by dilution:

The dilution methods for disposing of the sewage can favourably be adopted under the following conditions.

- When sewage is comparatively fresh (4 to 5 hr old) and free from floating and settleable solids. (or are easily removed by primary treatment)
- When the diluting water (is the source of disposal) has a high dissolved oxygen (0-0) content.
- Where diluting waters are not used for the purpose of navigation or water supply for at least some reasonable distance on the downstream from the point of sewage disposal.
- Where the flow currents of the diluting waters are favourable, causing no deposition, nuisance or destruction of aquatic life.
- When the out fall sewer of the city or the treatment plant is situated near some natural water having large volumes.