

CE-441-ENVIRONMENTAL ENGINEERING II

LECTURE 16 –ON-SITE SANITATION TREATMENT.

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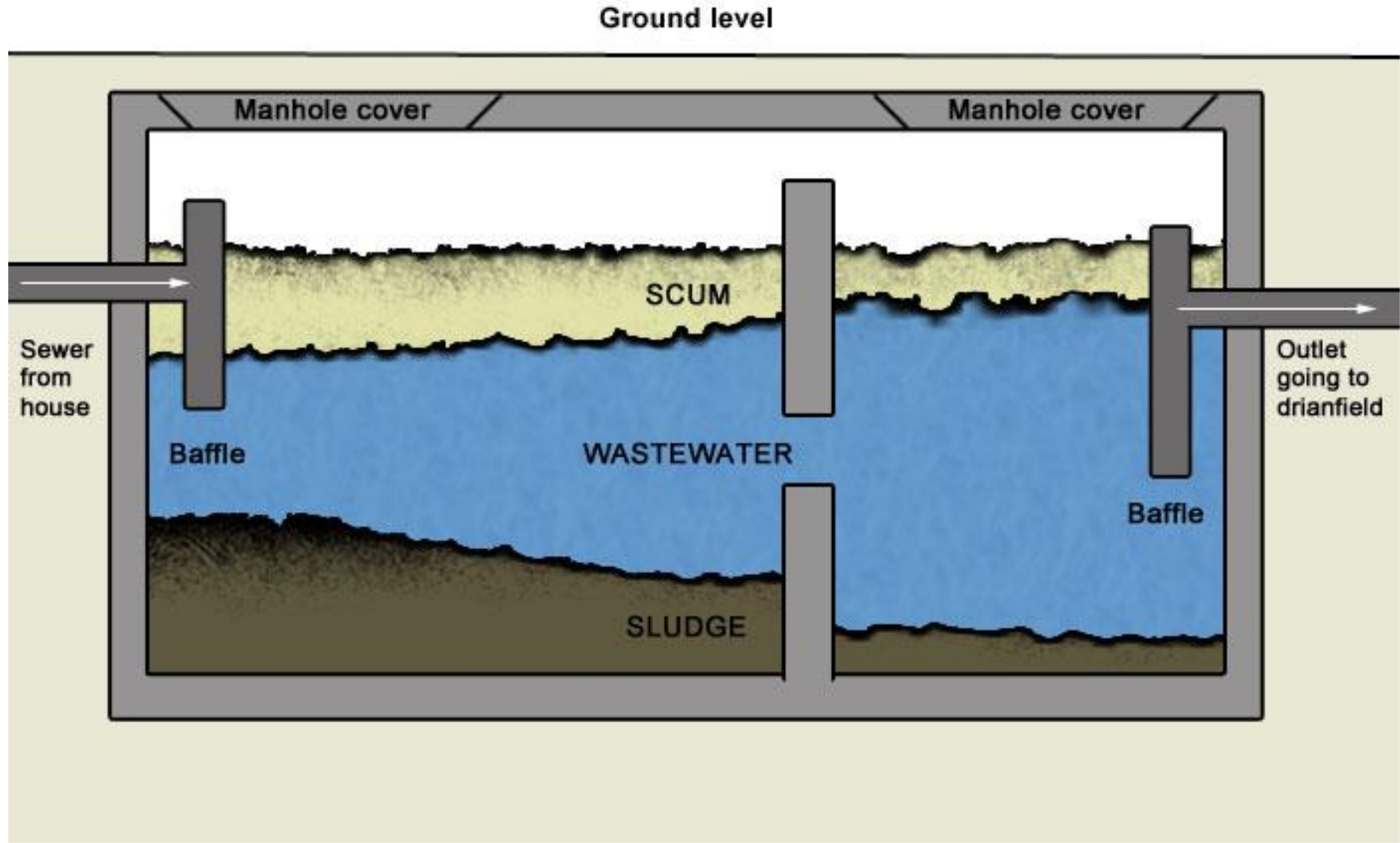
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ON-SITE WASTEWATER MANAGEMENT TECHNIQUES

Septic Tank:

- A septic tank is an underground structure, the purpose of which is collection, storage, and to limited extent the treatment of sewage.
- A typical septic tank system normally operates by gravity and consists of a tank and soak away drain.
- The septic tank is designed to accomplish two tasks:
 1. **Clarification** (removal of suspended solids, fats, oils and greases)
 2. **Treatment** (partial decomposition of the settled organic matter by anaerobic digestion)

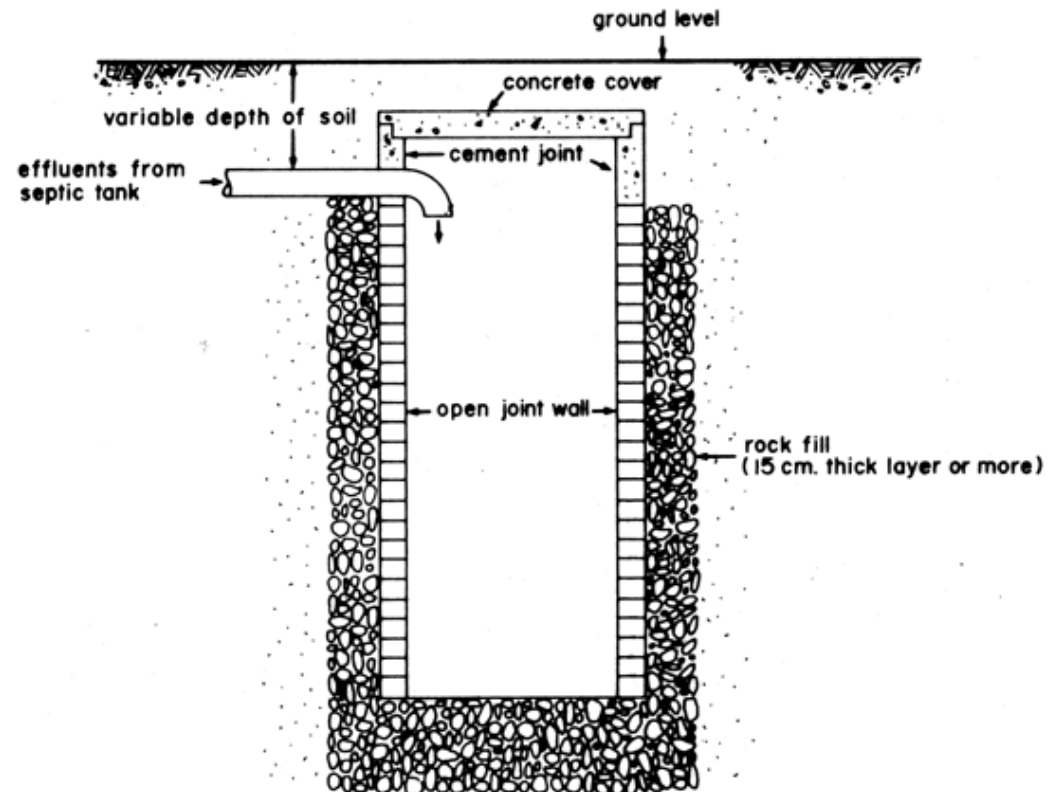
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Soak-away (Soak Pit):

- Soak away is an underground soil treatment system, which receives partially treated sewage from a septic tank and dispose it off into soil.



(Source: from Wagner and Lanoix,

ON-SITE WASTEWATER MANAGEMENT TECHNIQUES

NOTES:

1. Effluent from a septic tank must be discharged into a soak pit.
2. Bottom of a Soakage pit must be at least 3 m above the ground water table.