

Himalayan STP (Him-STP)

Compact, complete solution for decentralized sewage treatment in cold climates

Himalayan and sub-Himalayan climates are characterized by long frosty winters and uneven terrains. Sewage treatment plants in these geographic climates are not only difficult to construct but are also affected by drop in temperatures almost throughout the year, especially during the winter season.

Rise in tourism in the Himalayan and sub-Himalayan regions and subsequent discharges of untreated sewage from the hotels and homestays have put tremendous pressure on the sustainability of Himalayan eco-system.

Him-STP offers a perfect solution for sustainable sewage treatment in these areas. Him-STP is a combination of primary, secondary, and tertiary treatment all packed together in one compact unit. The oil & grease trap with sedimentation forms the primary treatment. The secondary treatment is based on Low Temperature Adapted Methanogenesis (LTAM) Process, wherein the wastewater is treated anaerobically using Low Temperature Resilient Microbial (LTRM) population. The tertiary treatment is composed up-flow constructed wetland (UCW) containing cold adapted local wetland macrophytes. The packing media of UCW also allows the growth of biofilm forming microbes that enhance nutrient removal from sewage.

Salient features

- Compact design for decentralized sewage treatment
- Performs at liquid temperatures 1-20 °C
- Based on LTAM followed by UCW processes
- Gravity designed, no electro-mechanical equipment required
- No external heating and aeration
- No special externally added inoculum needed
- Meets treated sewage discharge standards

Applications

- Individual households
- Hotels and homestays
- Panchayat office, small communities, schools, etc.



TECHNOLOGY

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