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Atal Mission for Rejuvenation and Urban Transformation

Govt. of Odisha

OWSSB BHUBANESWAR

SEPTAGE TREATMENT PLANT

at Basuaghai, Bhubaneswar

Key Facilities

- Full-scale SeTP of 75 KLD capacity to treat the septage generated in Bhubaneswar. Constructed by OWSSB under the AMRUT programme
- First-of-its-kind SeTP in India which treats both solid and liquid parts of septage in integrated way
- SeTP designed to treat liquid part of the septage using DEWATS technology
- Landscaping of plant area for aesthetics
- Solar plant of 10 KW capacity installed at the SeTP as a special feature

Facts

The SeTP has been constructed under the "Atal Mission for Rejuvenation and Urban Transformation (AMRUT)" programme by the Odisha Water Supply and Sewerage Board (OWSSB) at a cost of INR 3.54 crore.

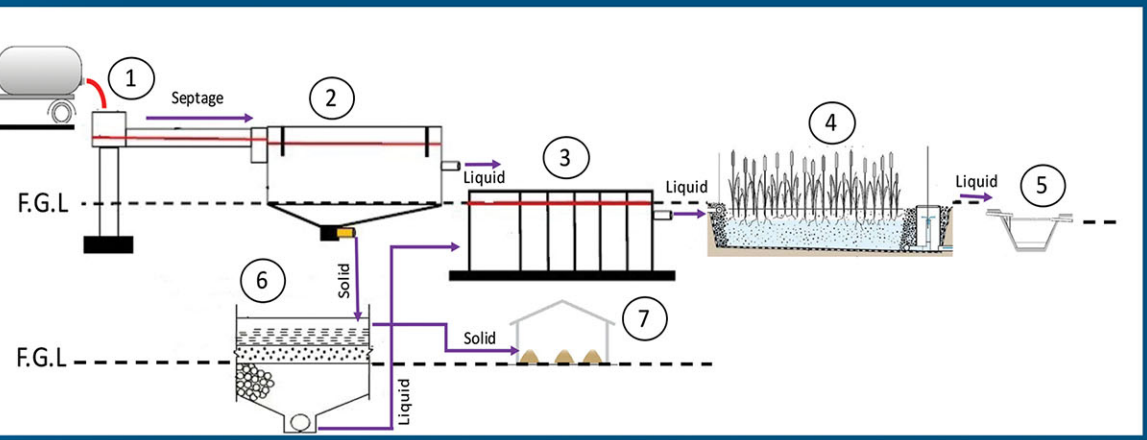
Features

The SeTP is designed to treat the liquid part of the septage using DEWATS technology. This is a gravity flow based system, where septage collected through cesspool emptier trucks is discharged to receiving chamber from where it flows to different units by gravity. The technology requires least mechanical and electrical interventions to run the process and is cost effective as compared to other technologies.

Benefits and uniqueness

- The SeTP will help reduce considerably indiscriminate disposal of untreated sludge and septage in the open as well as in the water bodies thus reducing pollution
- The low cost technology, operation and maintenance demonstrates a scalable and sustainable model for septage management in India
- Landscaping, plantation and solar panelling makes the SeTP environment friendly and appealing

	Component	Description
1	Receiving chamber with screen	Receives septage from cesspool emptier vehicle and screens solid waste from the septage
2	Settler-cum-thickener	Separates solid and liquid fraction from septage
3	Anaerobic Settler Anaerobic Baffle Reactor (ABR) Anaerobic Filter	Removes settleable solid and anaerobic digestion of organic fraction of septage
4	Planted Gravel Filter (PGF)	Removes BOD and nutrients through aerobic process
5	Polishing Pond	Collects effluent from PGF for further reduction of BOD and bacteria. Water from the pond is utilized for landscaping and plantation inside SeTP
6	Sludge Drying Bed	Used for dewatering and drying of sludge
7	Sludge Storage Yard	Collects and stores sludge from drying bed for composting/disposal



The SeTP covers an area of 2.47 acres out of which 1.3 acres have been utilised for landscaping and plantation. This is a unique initiative that not only enhances the aesthetics of the plant but is also expected to garner support of citizens and raise awareness on importance of treating faecal sludge and septage. The treated water is used for watering the trees and lawns in the SeTP campus

In addition, a solar plant of 10 KW capacity has been installed and made operational, which is an on-grid system. The surplus power can generate revenue for the plant.

The components are easily replicable and can be rapidly built and brought under operation

Orissa Water Supply & Sewerage Board (OWSSB)

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