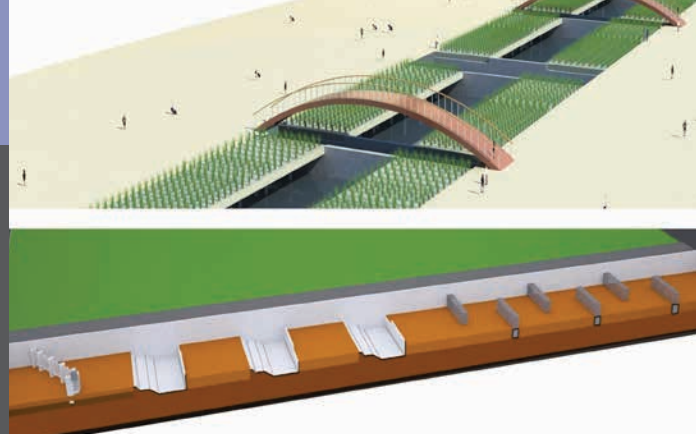
NTreat: In-situ Nallah Treatment



Problem Statement: Nallahs or open drains are a common sight in our cities and villages. Floating Materials, silting, unpleasant odour, encroachment, disposal of debris and garbage are some of the problems associated with Nallahs. A solution is required to reduce these problems. The team has developed NTreat for the treatment of Nallahs, which can be used by municipalities and commercial establishments to treat the wastewater flowing in the Nallahs, thereby reducing adverse impacts of wastewater discharged to rivers and other water bodies.

Uniqueness of the Solution: The in-situ Nallah treatment NTreat is a simple process and uses natural treatment methods. NTreat can be constructed in RCC and deployed in any nallah. The treatment process and prototype involve different water treatment steps, where the floating materials and sediments are removed in the Primary treatment step. The first step is followed by treating water using a natural method in secondary treatment. Finally, the process is repeated as per the quality of the water required as treated water.

Current Status of Technology: The newly proposed in-situ Nallah treatment is in its preliminary stage with TRL 9. Presently, the NTreat system has been perfricated in FRP and has been located next to a polluted drain in the lakeside on the IIT Bombay campus. It is being tested as a demo unit for a possible solution to treat drains in the Mahul Creek Area (a project sponsored by MMRDA). The cost of the product depends on the capacity, that is, the rate of flow needed in the nallah.

Societal Impact: This method can be used by municipalities and commercial establishments to treat the wastewater flowing in the Nallahs. The NTreat system can help to get rid of unpleasant odours and dirty nallahs. Thus, it will help improve the aesthetic environment for the people living nearby Nallahs.

Patent(s): Nil

Relevant Industries: Cities, Towns, Urban Local Bodies, Municipalities.

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