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Title of Invention: - Modified Stabilisation Tank for Onsite Treatment of Domestic Waste Water and / or Grey Water

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Abstract: Wastewater treatment is a burgeoning issue for all the developing countries including India. As per the CPCB statistics, hardly 30% wastewater is getting treated (average national figure). The major wastewater, domestic as well as industrial goes into the water bodies untreated. The Sewage Treatment Plants (STP) as well as Effluent Treatment Plants (ETP) are either non functional or are not sustainable due to energy requirement or skilled manpower requirement.

Current research is an attempt to treat the wastewater in a newly developed pipe system. The system consists of interconnected pipes having zigzag flow pattern and interconnected with small diameter pipes. The special flow pattern as well as positions of interconnections helps for efficient removal of solids and in turn BOD & COD get removed in a very efficient manner. The peculiarity of the system is that it does not require a single unit of energy, thus making it most sustainable system.

Outcomes:

1. Reduced load on STPs & ETPs, particularly reduction in cost required for collection and conveyance of waste through sewerage system.
2. Reduced dependency on fresh water. The treated waste water can very well be used for non consumptive use such as gardening, flushing, floor washing etc.
3. The system can be very well fitted in the side margins of any property producing the wastewater, thus making it a totally decentralised waste water management system without any requirement for skilled manpower, machinery or chemicals.