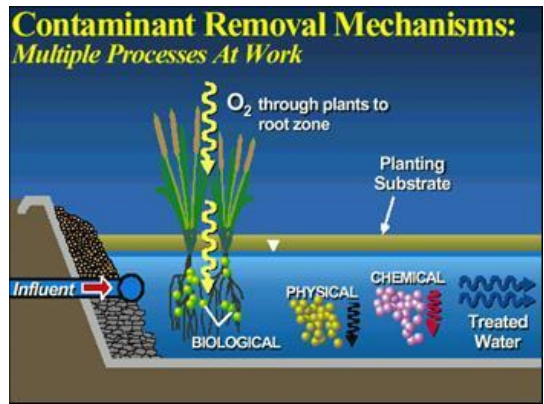
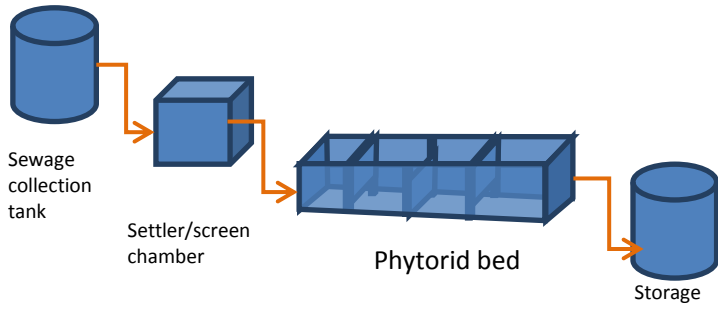
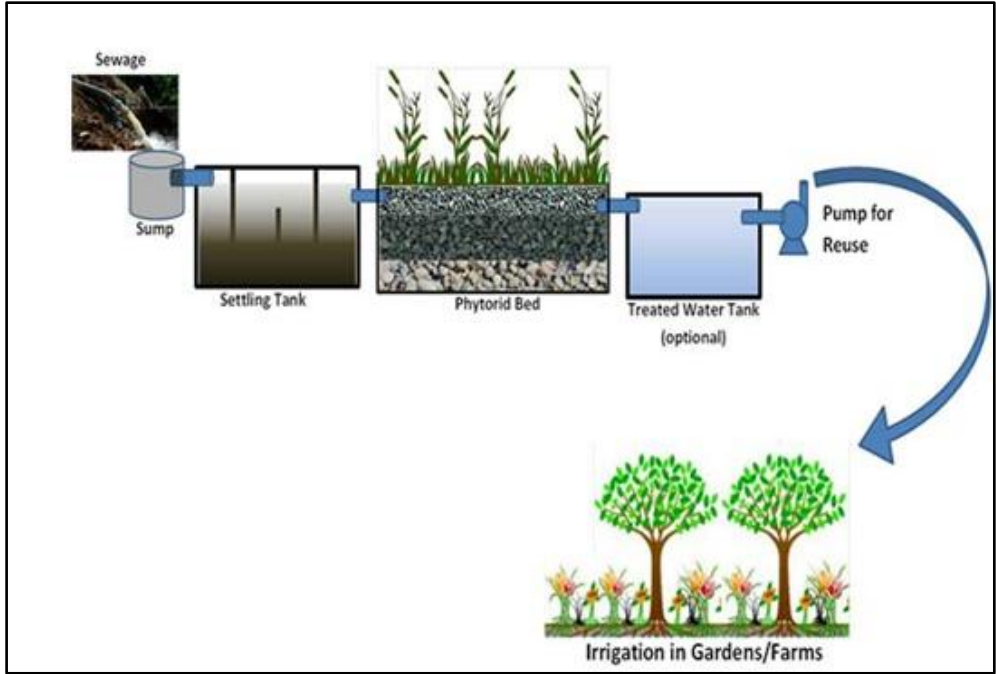


Phytorid Wastewater Treatment Technology

- CSIR-NEERI's technology involves a constructed wetland exclusively designed for the treatment of municipal, urban, agricultural and industrial wastewater
- The system is based on the specific plants, such as Elephant grass (*Pennisetumpurpurem*), Cattails (*Typha sp.*), Reeds (*Phragmitessp.*), Cannas pp. and Yellow flag iris (*Iris pseudocorus*), normally found in natural wetlands with filtration and treatment capability. Some ornamental as well as flowering plants species such as Golden Dhuranda, Bamboo, Nerium, Colosia, etc. can also be used for treatment as well as landscaping purposes
- The phytorid technology can be constructed in series and parallel modules / cells depending on the land availability and quantity of wastewater to be treated
- The phytorid technology treatment is a subsurface flow type in which wastewater is applied to cell / system filled with porous media such as crushed bricks, gravel and stones. The hydraulics is maintained in such a manner that wastewater does not rise to the surface retaining a free board at the top of the filled media
- The system consists of the following three zones: (i) inlet zone comprising of crushed bricks and different sizes of stones, (ii) treatment zone consisting of the same media as in inlet zone with plant species, and (iii) outlet zone
- The reduction in the treated effluent for the total suspended solids (TSS) varied from 70% to 80, BOD from 78% to 84%, nitrogen from 70% to 75%, phosphorus from 52% to 64% and fecal coliform from 90 % to 97%
- The treated effluent is useful for municipal gardens, fountains and irrigation
- The total area required for the system is approximately 35 sq. m. for 20 m³/day.
- This technology has been transferred to General Techno Services, Technogreen Environmental Solutions, Pune, BIOUMA, Goa and Devi Agencies, Aurangabad, and implemented to save water and cater the local people



IPR Status

Innovator

Salient Features

- Cost-effective
- Negligible operation and maintenance expenses
- Minimum electricity requirement
- Smaller footprint
- Facilitates recycle and reuse of water
- No foul odor and No mosquito nuisance

Awards / Recognition

Field installations



A view of the constructed wetlands

Technology Licensee

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2. Technogreen Environmental Solutions 101, Hem Opal, Plot No.26, Ekta Society Wakdewadi Pune – 411 003
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technogreen@vsnl.net Web:- www.technogreen.net
3. Alaknanda Technologies K-3, Krishna Ganga, Din Dayal Road, Opp. Post Office, Vishnu Nagar, Dombivali (W), Thane – 421 202 Alaknanda Technologies K-3, Krishna Ganga, Din Dayal Road, Opp. Post Office, Vishnu Nagar, Dombivali (W), Thane – 421 202
Email: info@alaknandatech.com, sales@alaknandatech.com, Web: www.alaknandatech.com
Tel:-0251-3232842 0990461282
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5. MM ENVIRO Projects Pvt. Ltd. First floor Akanksha Arcade, KDK College Road, Nandanvan, Nagpur – 440 009
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