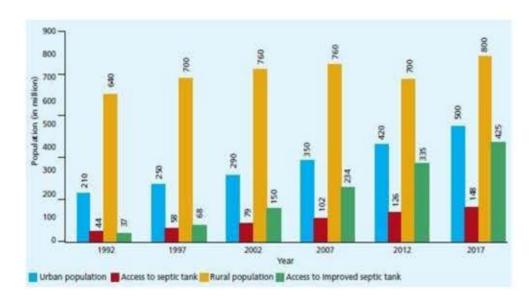
#### **Current Scenario**

1.2 Billion Population
(census 2011)

600 Million (55%) w/o access to safe sanitation





\* Policy Paper on Septage Management in India, CSE, 2011

#### Ongoing Projects/ Implementations:

- Karram Residency-Shahpur
- Matheran Hill station for hotels and public toilets
- Harmu River revival projects
- Godavari river revival, Panchganga river basin
- Mumbai slum sanitation in CRZ area
- Poonam Developers
- Mayuresh Builders
- Lonavala Municipal Council

# **EEPL-SINE IIT Bombay Company**

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# **NG-SEPCLEAN**

Next Generation Septic Tank—IIT Bombay



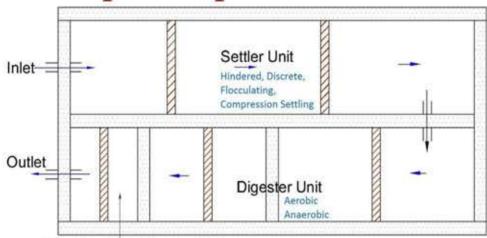
Breakthrough after 30 years of formulation of BIS Code, 1985

### **NG-SEPCLEAN**

Next generation Septic Tank has been developed to combat the current scenario by:

Providing safe sanitation through treatment of wastewater

## **Principle Components**



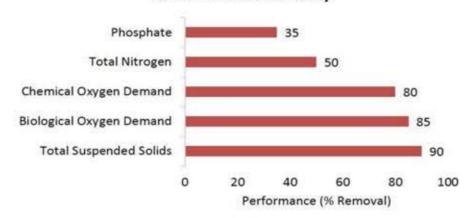
Filtration & Disinfection Unit

Parameters	Conventional Septic Tank	NG-SEPCLEAN  Low  Low energy required due to less sludge removal	
Cost	Low		
Energy for sludge removal	High		
Disinfection capacity	Not present	Present	
Cleaning Frequency	Annually	Biannually	
Reuse Potential	No	Yes	
Land requirement	Comparatively high	Less land (half of the conventional system)	
Efficiency of TSS 40 - 60%		75 – 90%	

#### **Performance**

Parameters	Performance (% Removal)		
Total Suspended Solids	75-90		
Biological Oxygen Demand	70-80		
Chemical Oxygen Demand	75-85		
Total Nitrogen	40-50		
Phosphate	30-35		
Fecal Coliforms	80-90		

#### NG-SEPCLEAN Efficiency





## **Application Areas**

Rural Areas

Schools

· Commercial Buildings

Hostels and Dormitories

Coastal Zone

Hilly Regions

Flat Terrains

Slums

Households



Design Specifications								
Households								
Family	Number of persons	Flow (L/day)	Area required (m²)	Time of Implementation for RCC and Brick Work (Days)	Time of Implementation for FRP (Days)			
Single	3	315	0.14	45	7			
	5	525	0.24	45	. 5			
Joint	7	735	0.33	60	7			
	10	1050	0.48	60	3			

Public Toilets							
Number of Toilet	Expected User(per day)	Flow (L/day)	Area required (m²)	Time of Implementation for RCC and Brick Work (Days)	Time of Implementation for FRP (Weeks)		
1	20	2100	0.95	45	2		
2	40	4200	1.90	45	2		
3	60	6300	2.86	45	2		
5	100	10500	4.77	45	2		
7	140	14700	6.68	45	2		
10	200	21000	9.54	60	3		
12	240	25200	11.45	60	3		
15	300	31500	14.32	60	. 4		

Durability of FRP for 30-40 years Frequency of Cleaning: Annually

Frequency of Checking: Once in three months