

Press Release

ANAEROBIC SEWAGE TREATMENT PLANT IN CMRL (CMBT STATION)

CMBT is one of the metro stations with large number of passenger footfall and large amount of sewage generation due to extensive toilet usage. Water usage at CMBT Station for toilet is around 6000 liters per month. Since the sewage system of CMBT Station is not connected to main sewage, sewage collected in the collection pit shall be removed at regular intervals. It was decided to have a sewage treatment system which will reduce the water consumption and avoid the cost of sewage removal. Moreover, it was decided to have a sewage treatment system, which will consume no power.

Anaerobic sewage Treatment System:

Anaerobic digestion is a collection of processes by which microorganisms break down biodegradable material in the absence of oxygen. The process is used for industrial or domestic sewage treatment.

Anaerobic sewage Treatment Process Flow:



As compared with conventional aerobic treatment methods, the anaerobic process offers significant benefits:

- Zero energy consumption.
- Minimal sludge production.
- Minimum space requirements.
- Low nutrient requirement.
- Space-saving
- Emission-free
- Profitable

The treated water meets Pollution Control Board (PCB) norms in water quality. At CMBT Station CMRL has constructed an anaerobic sewage treatment plant for 10 KLD capacity and commissioned on 05th Jun 2018, by which Rs. 15,000 is saved on Water purchase cost and Rs. 8,000 on sewage removal per month. Totally Rs. 23,000/- per month and Rs. 2.8 Lakhs per annum is saved by having this Anaerobic sewage Treatment Plant.

The treated water is used for watering the garden available in CMBT Station. There is a plan using treated water for toilet flushing by providing an ultra-filtration.

SEWAGE COLLECTION SUMP



BIO REACTOR TANKS



**PUMP ROOM CUM
FILTRATION PROCESS
AREA**

