

CONSTRUCTION OF 45MLD CAPACITY TERTIARY TREATMENT AND REVERSE OSMOSIS PLANT AT KOYAMBEDU

The Chennai city is covered with 98% sewer network. There are 12 sewage treatment plants at 4 locations covering 5 zones of sewerage system. The project area falls under **Zone III**, covering an area of 34.2 sqkm with a population of 9.5 lakhs (As per 2011 census). There are three treatment plants of 34mld, 60mld and 120 MLD capacity totaling 214 MLD exist at Koyambedu for treating the sewage generated in the Central Chennai & West Chennai City area and Adjacent Urbanised areas of Ambattur (Part) & Mogappair. The present generation of sewage from Zone III and adjacent urbanized areas is about 105 MLD. The capacity available by the year 2022 will be 214 MLD.



The Hon'ble Chief Minister of Tamilnadu has made an announcement under Rule 110 in the State Assembly that the waste water has to be recycled and reused. Accordingly, CMWSS Board has proposed to set up a Design, Build and Operate for 15 years (DBO) a 45 MLD capacity Tertiary Treatment Reverse Osmosis (TTRO) at Koyambedu including supply, laying and maintenance of M.S. transmission main for conveying product water to various industries situated at Irungattukottai, Sriperumbudur and Oragadam for about 68.00 KMS.

M/s. Engineers India Ltd was appointed as the consultant for preparing DPR, has prepared a Detailed Project Report at a cost of Rs.394.00 crores for this project.

The Government of Tamil Nadu has accorded Administrative Sanction at a cost of Rs.394.00 crores as per G.O.(Ms) No.147, dt.01.12.2014



for this project under JNNURM/TNIPP Funds which is as follows.

	Rs. in Crores
JNNURM – GOI share @ 35%	- 113.75
JNNURM – GOTN share @ 15%	- 48.75
TNIPP, Phase I	- 231.50

Total	394.00

As there was no release of funds under JNNURM by GOI, it was requested to provide funds under AMRUT and same was sanctioned on 10.01.2017 by SLHPSC on the following funding pattern.

AMRUT – Government of India (GOI) Share (33% of Rs.394.00 Crore)	- Rs.130.02 Crore
AMRUT – Government of Tamil Nadu (GOTN) Share (20% of Rs.394.00 Crore)	- Rs. 78.80 Crore
CMWSSB Share (47% of Rs.394.00 Crore)	- Rs.185.18 Crore

Total	- Rs.394.00 Crore

THE COMPONENTS OF WORK:

TTRO PLANT at KOYAMBEDU

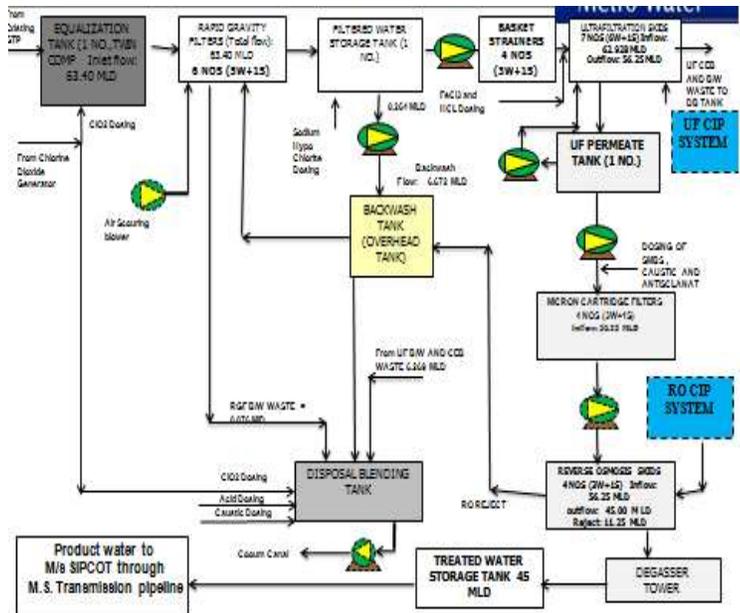
45 MLD capacity TTRO Plant covering three stages of treatment

- Pre-treatment(To control suspended impurities)- **Rapid sand Filters**
- Secondary treatment(To control silt density Index) – **Ultra Filtration**
- Tertiary treatment& Reverse Osmosis(To reduce TDS & providing disinfection)- **Reverse Osmosis**
- Ozonization system

M.S TRANSMISSION PIPELINE

Pipeline for conveying treated water to Small Industries Promotion Corporation of Tamilnadu (SIPCOT) to a total length of 68.00 KM as detailed below:

- Conveying treated water through pipe 800/700/600 mm dia MS pipe with cement mortar lining



inside & outside epoxy coating to a length of 33.63 KM,9.30KM & 19.38 KM, respectively.

- 4 Nos. of tertiary treated water storage tank have been proposed among which 2 nos of 10ML capacity each are located in TTRO plant site at Koyambedu and another at Irungattukottai (Pillaipakkam) & 7.8 ML treated water storage tank at Sriperumbudur (Vallam vadagal) and 5 ML treated water storage tank at Oragadam.

DEMAND ASSESSMENT FOR TTRO WATER:

- Demand assessment made for requirement of TTRO water to the various SIPCOT Industries situated at following locations.

- 1) Irungattukottai : 10.00 MLD (approx)
- 2) Sriperumbudur : 13.50 MLD (approx)
- 3) Oragadam : 22.50 MLD (approx)

CONTRACT AWARDED DETAILS:

The work was awarded to the contractor M/s Wabag –IDE Consortium, Chennai-117 for a contract value of Rs.396,50,00,000/- towards construction cost and Rs.197,59,77,000/- towards Operation and Maintenance cost for 15 years. The said work was awarded on 03.03.2016. The above said work has been commenced on 28.07.2016. The completion period for the work has been fixed as 24 months from the date of commencement of work.

PROGRESS OF WORK (AS ON 08.06.2017):

Physical Progress: - 10%

Financial progress - 8%

Probable date of completion - 30.07.2018.