

NESAPAKKAM 50MLD SEWAGE TREATMENT PLANT USING SEQUENTIAL BATCH REACTOR WITH POWER GENERATION USING BIOGAS ENGINE

Chennai Metropolitan Water Supply and Sewerage Board is operating twelve centralized Sewage Treatment Plants at Chennai City. The Central Pollution Control Board (CPCB)/Tamil Nadu Pollution Control Board (TNPCB) had prescribed revised discharge Norms for discharging secondary treated effluent from Sewage Treatment plants vide MoEF (Ministry of Environment and Forest) notification dated. 24.11.2015 as follows

| S.No | Parameters | Revised Norms |
|------|---------------------------------------|---------------|
| 1 | Biochemical Oxygen demand | < 10 |
| 2 | Total Suspended Solids | < 10 |
| 3 | Chemical Oxygen Demand | < 50 |
| 4 | pH | 6.5-9 |
| 5 | Ammonia Nitrogen (NH ₄ -N) | < 5 |
| 6 | Total Nitrogen (N – Total) | < 10 |
| 7 | Phosphorous (Po ₄ -P) | < 2 |
| 8 | Feacal coliform | < 100 |

In order to achieve the above revised norms and considering the population of 2035, CMWSSB has been proposed to construct 50MLD Capacity Sewage Treatment Plant at Nesapakkam based on SBR Technology.

The project cost for the above work is Rs.85.13 crores. Under this scheme, 50 crore litres of used water have been recycled based on design, engineering, construction, operation and maintenance works and the secondary treated water received from the plant is being disinfected with liquid chlorine and discharged into the Adyar River.

The work order for implementation of the project was issued by CMWSSB on 26.08.2019 to Ms. Khilari-Sattva Consortium and work is in progress from 13.11.2019.

So far, 61% of the construction works has been completed. As the construction work continues, machinery and electrical equipment are being supplied to the site for the project. These works will be implemented soon and the trial run will be held at the end of July-August 2022.
