## SEWAGE TREATMENT PLANT

### A₂O ACTIVATED SLUDGE PROCESS - SAND FILTRATION

#### 30 MLD, HMDA, HYDERABAD

<table>
<thead>
<tr>
<th>Client</th>
<th>Hyderabad Metropolitan Development Authority, Hyderabad</th>
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<tbody>
<tr>
<td>Contractor</td>
<td>Triveni Engineering &amp; Industries LTD.</td>
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<tr>
<td>Project Cost</td>
<td>INR 625 Million</td>
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<td>Scheme</td>
<td>JICA</td>
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<tr>
<td>Status</td>
<td>Under Execution</td>
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</tbody>
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#### Salient Features
- Anaerobic, Anoxic & Oxic Activated Sludge process for biological nutrient removal followed by Rapid Gravity Sand Filtration & Disinfection
- Plant designed to achieve treated sewage parameters as under for discharge into Hussain Sagar Lake:
  - BOD : < 5 mg/L
  - COD : < 70 mg/L
  - TSS : < 5 mg/L
  - Turbidity : < 5 mg/L
  - TN : < 10 mg/L
  - TP : < 0.5 mg/L
- Major Units of STP comprising of
  - Inlet Sewage Works (SPS)
  - Inlet Unit (Stilling Chamber, Mechanical Fine Screen Chamber, Mech. Grit chamber, Flow Measuring Channel)
  - Anaerobic, Anoxic and Oxic (A₂O) activated sludge process
  - Coagulant addition
  - Secondary Clarification / Sedimentation
  - Rapid Sand Filtration & Disinfection
  - Sludge Sump & Pump House
  - Mechanical Sludge Dewatering
- Plant Operation with PLC/SCADA System

#### Services Provided
- Preparation of Basic Engineering Design (Process & Hydraulic)
- Detailed Engineering including Preparation of G.A. Drawings & Civil Design, Piping, Electro-mechanical & Instrumentation Works