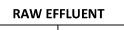


FLOW CHART OF 500 KLD SEWAGE TREATMENT PLANT PROCESS



Step 1. BAR SCREEN

A bar screen is mechanical filter used to remove large objects, such as rags and plastics, from wastewater.

Step 2. EQUALIZATION TANK/COLLECTION TANK

. The main function is to act as buffer. During the peak hours ETP comes at high flow rate. The equalization tank stores this effluent and lets it out during the non peak time when there is no /little incoming effluent.

Step 3. FLASH MIXTURE

After screening out debris and testing raw water, chemicals that encourage coagulation are added to the water stream.

The mixture is agitated quickly and thoroughly in process called flash mixing.

Step 4. UASB REACTOR

The up flow **Anaerobic Sludge Blanket Reactor** (UASB) is a single tank process in an anaerobic centralized or decentralized industrial wastewater or black water treatment system achieving high removal of organic pollutants.

Step 5. AERATION TANK

Wastewater aeration is the process of adding air into wastewater to allow aerobic bio-degradation of the pollutant components. It is an integral part of most biological wastewater treatment systems.

Step 6. LAMELLA CLARIFIER/SECONDARY CLARIFIER

A lamella clarifier is used to separate sedimentable solid (sedimentable particles) from liquids. In general, particles larger than approx. 50 µm (and of higher density than the liquid) can be separated by sedimentation.

Step 7. PRESSURE SAND FILTER

These filters are the most popular method for removal of turbidity from water.

Step 8. ACTIVATED CARBON FILTER

Is a method of filtering that uses a bed of activated carbon to remove contaminants and impurities, using chemical adsorption.

Step 9. FINAL OUTPUT

(Treated water)

SEWAGE TREATMENT PLANT CAPACITY: 500 KLD

