

ACTIVATED SLUDGE PROCESS



Categorization of Technology

BIOLOGICAL → **AEROBIC** → **SUSPENDED GROWTH**
Mechanized Treatment System (Conventional)

Technology Brief

Activated sludge process is one of the most commonly used conventional wastewater treatment technology. In this process, the wastewater and biological sludge are mixed with each other in the presence of abundance of oxygen. The mixed liquor obtained in aerator is allowed to settle in secondary aerator. The settled sludge withdrawn from the final settling tank is called 'Activated Sludge' since it is aerated and full of micro-organisms. This activated sludge is recycled back to the aeration tank while a small fraction is wasted to keep the system in a steady state. There is a complete dependency on aeration for the supply of oxygen, which makes ASP an energy-consuming treatment technology. Several variants of ASP have emerged to overcome the limitations of ASP which include variations in flow regime, pattern of recirculation and air supply.