CONSTRUCTED WETLANDS (Deep bed)

Categorization of Technology

BIOLOGICAL ⟶ **AEROBIC/ ANOXIC** ⟶ **ATTACHED GROWTH**
Engineered Natural Treatment Systems using 'Phytoremediation'

Technology Brief

The wetland vegetation and the microbial population present in media are the key functional units in constructed wetlands whose natural mechanisms assist in the removal of the contaminants present in groundwater or surface water. The design of constructed wetlands has been adopted by mimicking the natural wetland systems which are known to treat wastewater. Constructed wetlands are less expensive than the competitive mechanized treatment technologies, and are simple to operate. It is also claimed to require lesser land compared to other NTS. The large area requirement makes wetlands economical only where land is available at a cheap rate. Hence, deep bed wetlands are a variant of CWs, adopted especially in cold climatic conditions, where temperature conditions are not favorable for microbial growth.