CONSTRUCTED WETLANDS (SFV)

SFV - Surface Flow Vertical

Categorization of Technology

BIOLOGICAL $\longrightarrow$ **AEROBIC** $\longrightarrow$ **ATTACHED GROWTH**

Engineered Natural Treatment Systems using 'Phytoremediation'

Technology Brief

Constructed wetlands are engineered systems artificially developed to function natural processes along with coexisting microorganisms to aid wastewater treatment. 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. They are known by various names such as planted soil filters, reed bed treatment systems, artificial wetlands or vegetated submerged beds. 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. Surface flow wetlands perform best in a batch mode. The adequate oxygen supply ensures almost complete nitrification in this configuration.