

CONSTRUCTED WETLANDS (SSFV)

SSFV – Sub-Surface Flow Vertical



Categorization of Technology

BIOLOGICAL → **AEROBIC** → **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. Constructed wetlands are less expensive than the competitive mechanized treatment technologies, and are simple to operate. Sub-surface flow has a higher wastewater flow area, so less land is needed, making it suitable for urban neighborhoods. Further, the use of HSSF CW has the advantage of attractive biomass yield and also compensates for the evapotranspiration losses. Sub-surface CWs are less sensitive to extreme winter conditions of frost and snow and have a considerably lesser foul odor, mosquitoes, and algal formation problems, thus facilitating its universal adoption all over the world.