# OPERATION MODES

## MODES OF OPERATION

UASB process is successful for industries listed earlier, where the wastewater coming out of the industry is being continuously treated. The process is also successful for wastewater treatment when mode of operation is intermittent. For example, in the case of dairy wastewater treatment, the wastewater is generated only for few hours a day, and not continuously. The process is reported to perform well even under such intermittent mode of operation [Ghangrekar, 1992]. Also, this has been experienced that [Ghangrekar, 1997] the intermittent operation is useful during initial days of operation to overcome problem of sludge buoying due to poor quality of inoculum used. In case where excessive volatile acids production occurs in UASB reactor, reducing pH lower than 6.5, intermittent mode of operation could be resorted to reduce volatile acids concentration and increase pH in the reactor.

UASB process is also applicable for the treatment of wastewater from the industries, which are seasonal in origin, like food processing industries. Once, the primary start-up of the reactor is over, with development of good quality of granular sludge, the shut down of the reactor is possible when the season is over. The reactor put into operation in new season takes 2 to 3 weeks, for this secondary start-up, to restore its COD removal efficiency [Ghangrekar *et al*., 1996b]. For short duration of shut down less than a month reactor can capture its original COD removal efficiency within a week.