

## **Problem of Foaming**

Excess Foaming, in GSS device is often a chronic problem in UASB reactor. Foaming may be caused due to natural and synthetic detergents, oil & grease, proteins, lipid, polymers, vegetable gums, and alkaline salts, one or more of which could be present in the wastewater.

The severe foaming in gas collector can cause problems such as lifting of gas collector, blocking of gas pipes, fouling of separation of gas from solids due to improper gas-water interface. Due to chocking of gas pipe, the collector provided inside the reactor gets filled with biogas and foam, and gas starts escaping from the settling compartment. This affects adversely on settling of solids and results in greater washout from the reactor.

The foaming problem can be reduced by reducing concentration of the foam causing material in the influent either by prior removal or by dilution or by installing mechanical foam separator, water-spray scrubber or spraying antifoaming agent.