INSTANT WATER FILTER

BRIEF DESCRIPTION:

Instant Water Filter is the water purification system suitable for potable water supply particularly under emergency situation with a wide range of flood water quality. It meets drinking and cooking water requirements on emergency basis and serve as a disaster management tool for drinking water supply under flood affected situations. A typical unit, with two 100 L vessels, can serve about 20-30 persons, when operated for 10 hours a day, on the basis of 6-10 litres per capita/day for drinking and cooking purposes.

A typical unit comprises two plastic containers placed at elevation difference to manage gravity flow. The given oxidizing chemical solution is added into the raw water container. The filtered water from the tap is collected in the third container. The given disinfectant solution is added to this treated water container, once treated water starts accumulating in the container. The container is allowed to fill up to the capacity. Safe potable water is ready for use after half an hour. The filter needs periodical cleaning. The typical capacity of the unit is 20-30 L/hr. of treated water.

COMPARATIVE ADVANTAGES:

Produces potable water within few hours
Treatment without electric power supply
Operating cost Rs. 3 per 100 litre
Removes turbidity, organic matter and bacterial contamination
No change in dissolved salts in the water
Can be used as a domestic iron removal unit

Scale of Development: Commercialized

