Water Purification through Ceramic membrane based process

IPR STATUS
Off Patent

APPLICATION/USES

- Removal of arsenic and iron from contaminated groundwater for production of Quality Drinking Water
- Pretreatment of river water for removal of colloidal material to produce drinking water by Ceramic Membrane based process

SALIENT FEATURES

Technology is essentially a hybrid type comprising of two steps:

 Adsorption of arsenic by the colloidal media particles suspended in water and Application of membrane based separation technique for solidliquid separation using ceramic micro-filtration membrane modules.

The level of purification achieved is as per WHO recommended limits for arsenic (<0.01 ppm) and iron (<0.3 ppm) in Drinking Water.

LEVEL/SCALE OF DEVELOPMENT

 Developed and deployed through licensees at multiple locations

LINE MINISTRY MAPPING/USER SECTOR

Department of Public Health Engineering / Ministry of Rural Development etc.











Water Purification through Ceramic membrane based process



Retentate line

Filter water outlet

Stainless Steel Module

Control valve Raw water suction line

Discharge line to modules

Pump

Frame

Components of water purification plant













Installation at different locations









