ARSENIC REMOVAL FROM GROUNDWATER

SUMMARY APPLICATION:

It is an adsorption technique. A naturally occurring ferruginous manganese ore (FMO) is used as adsorbent for iron and arsenic in contaminated groundwater and may be applied at both domestic and community level. A domestic three compartment filtration unit employing this technique has been developed at an associate laboratory of NRDC. It works for both As(lll) and As(V) without any pre-treatment. At domestic level the hardware does not require electricity. The process comes with a sludge management protocol.

COMPARATIVE ADVANTAGES:

The process can be used at domestic as well as community level.
The ferruginous manganese ore (FMO) used as adsorbent for iron and arsenic is non-toxic
The community level plant equipment and machinery can be designed as per the client requirement
It is a cost effective technique with filtered water cost at 3-5 paisa per litre covering all possible recurring expenditure and the hardware cost at Rs. 600/- per unit (one time).

Technology is ready to be licensed.

