DRDO - FICCI Accelerated Technology Assessment and Commercialization (ATAC) Programme

RO based Mobile Water Purification System (MWPS)

Defence Laboratory Jodhpur (DLJ)

Large-scale biological and chemical contamination of environment, equipment, food and water may take place in case of an Industrial accident, natural calamity, terrorist activity, etc. Water is one of the most basic requirements for survival of human beings during any type of calamity.

Keeping the above scenario in view to meet the challenges of post disaster management, the lab has developed a reverse osmosis based Mobile Water Purification System (MWPS) mounted on Stallion vehicle for efficient removal of suspended solids, dissolved salts (up to 4000 ppm) and biological and toxic chemicals from contaminated water. WPS is a mobile unit fitted on 5/7.5-ton stallion vehicles along with a self-supporting power system by a DG set. It has a capacity to produce up to 3000 litres of drinkable water per hour from brackish water, contaminated water with biological and toxic chemicals.

The NBC Water Purification System has undergone the extensive trials by various agencies, proving its capabilities. The vehicle has proved its efficacy in the relief work after various natural calamities like TSUNAMI at Nagapattinam district of Tamilnadu and Kawas floods at Barmer distt of Rajasthan.

Areas of Application

The reverse osmosis based MWPS could be of immense value and utility in the following situations:

- Post Industrial disaster purification of contaminated water to provide drinking water to masses. Toxic chemicals, heavy metals & microbial contaminants are very efficiently handled by the system.
- Post disaster (natural or man made) management, especially for providing potable water. Systems high mobility is of very good use in such situations.
- Provision of Potable water during temporary gatherings of masses like various religious fairs (e.g. Kumbh fair, Urs fair, etc), public gatherings, etc

For further details please contact:
Mr. Rubaab Sood,
Deputy Director,
FICCI
M: 09810006621
E: rubaab@ficci.com