

*Ion Exchange, through extensive R&D and field trials, extended its technology to develop treatment systems appropriate for rural needs in terms of cost, ease of operation and maintenance. Our drinking water solutions for rural India are much in demand and this issue spotlights recent contracts we received from across India.*

## Disaster Management Units for PHED, West Bengal

We supplied two 2000 l/h truck-mounted disaster management units for drinking water to the Public Health Engineering Department (PHED), West Bengal.



**INDION®** Mobile Disaster Management Unit (DMU)

Treatment consists of ultra filtration and reverse osmosis followed by ozonation for disinfection. The treated water is packaged into 500 ml pouches (4000 pouches per hour are produced for distribution). The compact, skid-mounted units are fully containerised; DG sets as power backup are mounted on the truck and the units can be operated on an external power source as well.

Our INDION disaster management units have been designed to treat any source of water available at the time of natural disasters and make the water suitable for drinking.

## Iron Removal for PHED, Assam

We supplied 850 units of iron removal handpump attachments to the Public Health Engineering Department (PHED), Assam. The units are based on our patented iron specific resin INDION ISR and provide iron-free drinking water to the rural areas. Compact, sturdy, easy to operate and maintenance free, they are also economical as they do not require electricity or chemicals (only simple backwashing) and are thus ideal for rural applications.



**INDION®** Iron Removal Handpump Attachment

## Arsenic & Iron Removal, Bihar

We supplied twenty-one 5 m<sup>3</sup>/h arsenic-cum-iron removal units to Punj Llyod Limited under the Mini Water Supply Scheme in Bihar. The solar-powered units will provide arsenic-free and iron-free drinking water to villages in Bihar. Based on our patented iron specific resin INDION ISR and indigenous adsorbent resin INDION ASM, the treatment units are designed to selectively remove arsenic from ground water without affecting the characteristics of influent water.





**INDION®** Solar Based Community Plant for Arsenic Removal

INDION ASM has successfully met the Toxicity Characteristic Leaching Procedure (TCLP) test as per EPA 1311 and was found safe for disposal.



**INDION®** Fluoride Removal Handpump Attachment

Both the units have been successfully field tested in the presence of the engineers of the UP Jal Nigam.

## Arsenic & Fluoride Removal in Uttar Pradesh

We demonstrated and installed an arsenic removal handpump attachment unit at village Boutha, Gorakhpur district in collaboration with UP Jal Nigam Gorakhpur. Six households in the village are using the treated water from this unit which has a flow rate of 15 litres per minute. The arsenic level in the treated water is nil as compared to 60 ppb in the raw water.



**INDION®** Arsenic Removal Handpump Unit

We also installed our fluoride removal handpump attachment unit at Soanbhadra in Robertganj district. Three households are using the fluoride-free water from the handpump. Treated water flow is 8 litres per minute. This too had been done in collaboration with the UP Jal Nigam.

## Drinking Water Treatment in Punjab

About 50 villages with a population of around 45,000 are benefiting from our water treatment plants at Hardosharni and Tibbad, near Pathankot, Punjab. The water available was not suitable for drinking, cooking or bathing, due to very high turbidity and the presence of high biological content. The water treatment plants which consist of a continuous sand filter (no stoppage for backwash) and an activated carbon filter, produce 50,000 litres of potable water per day. Villagers have noticed visible improvement in the quality of the treated water.



**INDION®** Water Treatment Plant

**INDION®** is the registered trademark of Ion Exchange (India) Ltd.