

# PurAID

the modular cost-effective water treatment solution for rural communities



- tailor-made water supplying system
- modular solution to serve more people
- complete way to remove arsenic from drinking water
- easy to install and operate
- small footprint
- wide capacity range: from households to small waterworks

Containerized, mobile and modular drinking water purifying system for rural areas to treat the existing but contaminated water in an easy and cost-effective way. PurAID is a sustainable tailor-made water supply system for rural, isolated or less accessible areas and at institutions (hospitals, hotels, schools, etc.).

PurAID system provides a complete solution to remove iron, manganese, ammonia, arsenic, boron and iodine and infections from drinking water in five steps. Depending on the contamination of the water, PurAID is possible to provide more tailor-made assistance.



provide clean potable water by removing arsenic contaminants



completely automatic system with as minimum operator intervention as possible and with remote supervision



transportable, compact, easy to install solutions



plug and play, easy to put into operation



modular solution to build up a network with 5-10 single units



removal of iron, manganese, ammonia, arsenic, boron and iodine and infections



small footprint



less construction work required



can be operated either from a solar panel



can be used even in the less accessible rural areas



chemical-free solution



re-generable adsorbents inside

## CONCEPT OF THE SYSTEM

The PurAID units can easily be organized into a network by connecting 5-10 individual units into a complex system, installing a Service and Monitoring Center as well.



- provides clean, potable water from contaminated drinking water
- designed to use in rural areas and fit local needs
- design allows fitting the energy supply to the local conditions: solar panel or AC input
- easy to match the technology to local water sources having different water qualities
- can be joined to existing tube-wells
- easy to adopt to other solutions
- sustainable and environment-friendly solution
- no needed to store water

PurAID units are installed a pallet sized uniform metal box. Each box is equipped with a communication device to transmit the data having been measured by the sensors of the modules. It works via GPS system to the Service and Monitoring Center. Regeneration and changing of the filter media and adsorbent materials is also performed in the Center.

## ADDITIONAL BENEFITS OF THE PRODUCT

- Simple to use convenient for women or children to use the system
- Flow-through system for ongoing water supply if it is necessary
- Simple maintenance: the system does not require continuous operator control
- Simple to fit to different water source and existing water treatment technologies
- It does not change the smell, taste and colour of the water
- The compact, one container system blocks the contamination of the parts, mainly the filters and adsorbent
- The life cycle of the arsenic or boron adsorbent is minimum 7 years and the waste adsorbent is not hazardous material, UV lamp needs to change in every two years

Regenerable adsorbent inside: when the adsorbent material reached its capacity limit (after 3-24 months, depending on the water quality) a regeneration (time duration: 7 hours) is needed with commercial chemicals. This process can take place in the Center where the contaminated adsorbent material will be handled safely.

## TECHNICAL DETAILS OF THE MWU-S

Daily water supply/24 hours	100 – 6,000 litres
Transport size	1,200 mm × 800 mm × max. 2,000 mm
Weight	max. 500 kg