

Scottsdale company touts clean-water technology

by **Max Jarman** - Feb. 26, 2011 05:26 PM
The Arizona Republic

A Scottsdale-based company believes it has found a better way to deliver relief to disaster-stricken areas whose water supplies have been interrupted or contaminated.

The solution is about the size of a **postcard** and weighs less than an ounce. When submerged in water, Hydration Technology Innovations' HydroPack transforms into a 12-ounce pouch of drinkable liquid.

That water can come from a mud puddle, irrigation ditch or pond. U.S. troops in Iraq used the company's **technology** to convert their urine into potable liquid.

HydroPacks use a forward-osmosis process, different from the more conventional reverse osmosis, to purify water without the use of pumps or other mechanical devices.

The company, which is partly owned by Scottsdale-based restaurant franchiser Kevin Blackwell, hopes to sell tens of millions of the packs to relief organizations and disaster-stricken countries around the world.

Walter Schultz, Hydration Technology Innovations' CEO, explained that the packs represent a paradigm shift in the way relief can be delivered to disaster areas.

"It is lightweight, compact, utilizes existing water sources and less expensive to airlift than bottled water," he said. "We believe it will

become the new standard for first-response disaster relief."

The small HydroPacks have a 15-to-1 weight and size advantage over bottled water and can be dropped easily from an aircraft into a disaster area.

On the ground, the equivalent of 5,000 liters of water can be moved with a pickup truck instead of a water hauler.

"The HydroPack has the potential to change the way that governments and non-government relief organizations respond in a disaster situation," said Catherine Mwangi, executive director of Kenya Water for Health Organization, a non-government group that strives to provide sustainable water and sanitation for the disadvantaged communities in Kenya.

"The HydroPack may be a compelling solution to first-responders."

In January, the Kenya Water for Health Organization oversaw a 10-day trial of the HydroPacks in Mudimbia, Kenya, a village whose access to clean water is frequently interrupted by floods.

Advertisement



USA TODAY
AutoPilot 

The new travel app for iPhone® and iPod touch®

Presented by: 

SEE HOW IT WORKS >>

The advertisement shows a smartphone displaying the USA TODAY AutoPilot app interface. The screen shows flight information for a USA TODAY Meeting on Sep 21, 2009, including a flight from BNA to IAD, weather for Washington (IAD), and a link to view a Flickr gallery of Washington. The phone is shown at an angle, highlighting its sleek design.

Print Powered By  FormatDynamics™

During the trial, the village's 400 residents used HydroPacks as their primary source of drinking water.

"It clearly proved the efficacy of the product in a real-life situation," Schultz said.

The product also was tested in the field last year when the disastrous earthquake struck Haiti. The company sent 30,000 of its recently developed HydroPacks to Haiti to provide relief to earthquake victims.

"The feedback from Haiti was invaluable," Schultz said.

Unlike reverse-osmosis-filtration processes, which use pumps to pull water through a membrane, forward osmosis coaxes water through using a dry salt or sugar mixture as a draw.

Schultz explained that water molecules are naturally attracted to the draw solution and migrate to it through a **patented** proprietary membrane.

The membrane is made of a synthetic plant material and traps bacteria, viruses, chemicals and other dissolved solids. The process takes about 10 hours for the pack to fill with water.

The draw material contains flavoring, electrolytes and calories to provide for complete hydration. There are four flavors - orange, grape, lemon-lime and tropical fruit.

The company also makes retail versions of the products for backpackers and boaters. A saltwater product desalinates seawater and can be stowed in life rafts for use in a water evacuation.

The company also makes industrial water-

filtration products that are used in landfills, oil and gas exploration and for the production of algae biofuels, among other uses.

A military version is used by troops to purify water in the field.

The company was founded in Albany, Ore., in 1986 but moved its headquarters to Scottsdale several years ago after Blackwell invested in the business. The company employs about a half-dozen people in Scottsdale.

Blackwell is CEO of Kahala Corp., a restaurant franchiser whose concepts include Cold Stone Creamery, TacoTime, Blimpie and Samurai Sam's.

Hydration Technology Innovations continues to manufacture its products in Albany, Ore., where about 40 people are employed. The company posted 2010 sales in the \$2 million range that came equally from retail, military and industrial customers.

Schultz is optimistic that the disaster-relief market, now being cultivated by the

Advertisement

The advertisement features the USA TODAY logo at the top left. Below it, the word "AutoPilot" is written in a large, bold, black font, with a blue airplane icon to its right. Underneath, a smartphone screen displays the app's interface, showing flight information for a "USA TODAY Meeting" on Sep 21, 2009, including a flight from BNA to IAD, weather for Washington (IAD), and a Flickr gallery link. To the right of the phone, the text reads "The new travel app for iPhone® and iPod touch®". Below this, it says "Presented by: Hampton" with the Hampton logo. At the bottom right, a blue button with white text says "SEE HOW IT WORKS >>".

Print Powered By FormatDynamics™



company, will produce significantly higher sales.

Copyright © 2011, azcentral.com. All rights reserved. Users of this site agree to the [Terms of Service](#) and [Privacy Policy/Your California Privacy Rights](#)

Advertisement

USA TODAY
AutoPilot 

The new travel app for iPhone® and iPod touch®

Presented by: 

SEE HOW IT WORKS »

The advertisement features a smartphone displaying the app's interface. The screen shows a 'USA TODAY Meeting' for 'Sep 21, 2009' with a flight status for 'A6 BNA to IAD Landed' at '09:21:0009 11:48 AM'. Below this, it shows weather for 'Washington (IAD)' as 'Partly Cloudy' and a link to 'View a Flickr gallery of Washington'. At the bottom of the screen, there is a link for 'Articles - Hotel Check-in Hilton Hotels plucks'.

Print Powered By  FormatDynamics™