
From: Ed Beaudry [E.Beaudry@HydrationTech.com]
Sent: Friday, February 03, 2006 6:17 PM
To: zzMSHA-Standards - Comments to Fed Reg Group
Cc: Bob Salter
Subject: RIN 1219-AB44: Hydration Solutions for Trapped Miners

Mine accidents often leave miners trapped for extended periods while rescuers attempt to locate and evacuate survivors. Trapped miners must find a means of hydration, essential to survivability in an extended period while trapped underground. Water is normally present throughout mines, but it is nonpotable, severely contaminated with dissolved and suspended inorganic pollutants. In past mine accidents, rather than drink water off the floor of the mine, miners have drunk urine.

A passive, easy-to-use, lightweight technology available to miners to enable them to avoid dehydration would increase the likelihood of survival.

Forward Osmosis membrane technology products have been used in the Asian tsunami relief, Hurricanes Katrina and Rita aftermaths, and by the U.S. military. These same products would allow miners to access contaminated water in the mine. The products were used in the toxic waters on the streets of New Orleans, reducing the heavy metals and biological contamination to nondetectable levels. If Forward Osmosis filters were made available to miners they would provide not only safe drinking water, but calories and electrolytes, in accidents where rescue is delayed.

The website www.hydratationtech.com provides background on Forward Osmosis technology.

Edward G. Beaudry, D.Sc., P.E.
Director of Process Development
Hydration Technologies, Inc.
2484 Ferry St. SW
P.O. Box 1027
Albany, OR 97321
541-917-3335 x302
541-917-3345 fax
E.Beaudry@HydrationTech.com
www.HydrationTech.com

**MSHA Docket No.
AB44-Comm-14**