

ENERGY AND THE ENVIRONMENT

MOTION

Subsequent to the hurricane disasters that impacted the Gulf Coast in 2004 and 2005, the Federal Emergency Management Agency (FEMA) struggled to provide water to hard-hit areas. In an effort to avoid this from happening again, FEMA recently purchased two 40-foot trailers that can extract thousands of gallons of pure water from the atmosphere each day.

The "water machines" as they are called, use a new and revolutionary hygroscopic technology that consists of a natural salt-based solution. This solution is highly attractive to moisture and literally strips water molecules from the air.

Each mobile water system derives about 2,500 gallons of water from the air each day at a cost of about 15 to 30 cents per gallon, which is significantly lower than the \$15 per gallon cost to transport water to disaster sites. Additionally, these mobile water systems come equipped with their own generators as well as containers to package the water produced.


Aqua Sciences, a privately held firm based in Miami, Florida, developed this highly effective water-harvesting process which also has the ability to work in low-humidity desert settings.

At this stage, FEMA plans to focus on future storm events and get the mobile water systems out to critical sites ahead of time in order to more readily address population needs.

In the past, the City has also been impacted by major disasters, primarily associated with earthquakes and wildfires, which has had an effect on the delivery of water to the regional population. Given this, it would be wise for the City to explore the use of alternative water sources, such as hygroscopic technology, in the event of natural disasters and related emergencies.

I THEREFORE MOVE that the Department of Water and Power report to the Energy and Environment Committee in 30 days on the nature and viability of hygroscopic technology which derives water from the atmosphere, or any similar water condensation technology; and the potential for using this water-producing technology in the City as an emergency water source.

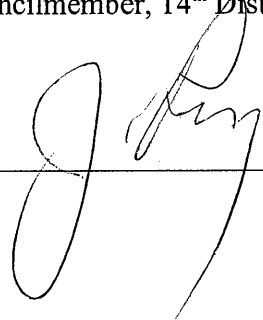
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