



# A DROP to DRINK

BY JACQUI COOK

*For many of us, December 26, 2004, began in a sleepy, post-holiday haze. Maybe you spent the day lining up gifts to be returned or munching on some leftover sugar cookies. Perhaps you just took advantage of a quiet Sunday at home, thankful the rush was over and you could just relax.*

*No matter how you spent the day, though, eventually that peace was shattered when you switched on the television or the computer and were confronted immediately with the devastation that was unfolding on the other side of the world. Everywhere the headline blared: **Tsunami Strikes Southeast Asia; Death Toll in the Thousands.***

The images that followed during the next hours and days are seared into memory: dazed toddlers separated from their parents, battered tourists clinging to life atop trees and buildings, and, of course, the thousands of dead and missing, their loved ones overcome with grief as days wore on with no hope. The situation quickly went from grim to dismal to hopeless.

In the end, almost 200,000 people were killed and more than half a million were left homeless in India, Sri Lanka, Indonesia, Thailand, and other Indian Ocean areas. Thousands of bodies have never been recovered and the missing are presumed dead.

And amid the early devastation and the unfathomable body counts, warnings began to surface that another kind of storm was not far behind. This particular enemy could wipe out thousands more people than the tsunami and, worse, could stretch far beyond the immediate areas, triggering a global public health crisis.

The only way to stop this second wave of impending doom: Water. Pure, clean, drinkable water. It was a daunting task, bringing clean water to an area utterly destroyed by the tsunami. Even in the most developed areas, the infrastructure to deliver fresh water was gone. The options were few ... until flickers of hope began lighting up, clear across the world, in the Lisle, Ill., office of the Water Quality Association.

#### DESIRE TO HELP

WQA is a trade association made up of 2,400 worldwide company members representing the household, commercial, industrial and small system water treatment industry. It was

founded in 1974 following the merger of two predecessor organizations, the Water Conditioning Foundation and the Water Conditioning Association International, and it now represents both manufacturers and dealers.

The mission of the WQA is "to unify the industry, promote the individual right to quality water, the dissemination of water quality information, and the growth of the water quality improvement industry. Activities, programs, and services are designed to enable the industry to perform with the greatest economy and efficiency and to provide the greatest service to the public. Our focus is on industry issues, education, and idea exchange."

WQA Executive Director Peter J. Censky says that like most people, he initially watched the tsunami story unfold on television, first talking to friends and family about the devastation. "But in the back of my mind, I'm thinking I've got to do something — I'm in a position where I can do something," he says.

It seems many WQA members had the same thought. Within two days, members began contacting him and WQA's executive editor/communications John Ferguson to find out what they could do to help. With a membership that ranges from the major water product manufacturers — like Maytag, Brita and Pür — to the smallest mom-and-pop dealers, the challenge was to respond to these requests in an appropriate way for both the type of member and the situation.

"Every association is different," Censky says. "In our case, we're in the water improvement business and we're worldwide, so when this occurred, our companies looked at themselves in

the mirror and said, 'If we don't get involved in this, then what the hell are we doing in this business?'"

He spoke to then-WQA Board President Greg Norgaard, who told him to do whatever was necessary. Then Censky mobilized his staff with the same message: Do what needs to be done. For the first week or two, as many as four people on the 32-member WQA staff were working on the tsunami effort at any one time. Ferguson estimates he spent 20 hours on it the first week, 10 the next and a little bit less each week thereafter. Aside from staff time, though, there was little impact on the WQA's \$4.4 million annual budget yet the efforts still produced big results.

Of course, it's one thing to want to get involved, but it's another matter entirely figuring out how to do it. That's where having an association with worldwide resources and contacts came into play. Luckily, several WQA members already had relationships with companies in the affected areas. Those contacts were the primary source for figuring out what needed to be done.

"People called me and said, 'What's the strategy? What should we be doing?'" Censky says. "I operated on the phone with a number of them to try to figure out what would be the smartest way our members could have something to contribute."

#### ABILITY TO HELP

First, WQA sent e-mails to members in that region and quickly determined that most electronic communication had been destroyed. The next step was to relay information through the people on the ground. So manufacturers who had contacts nearby — but not in — the affected areas relayed information through those individuals, who in turn were talking to people on the ground about what was needed.

At the same time, WQA contacted Water For People, a Denver-based international development organization with which it had worked in the past on fund-raising efforts. Nancy Haws, WFP's communications director, says WQA was certainly not the only group wondering where to go next.

"We were buried with calls in the first six to seven weeks — from the media, our donor base, manufacturers, the general public — they all wanted to help and wanted us to be the conduit with Southeast Asia," she says.

WFP determined quickly that the best thing to do was make sure everybody was disseminating the same information and had quick access to it. The result was the formation in early January of "a consortium of international nongovernmental organizations and water industry professionals to share expertise and minimize duplication efforts in working on the crisis."

The consortium included WQA and WFP, as well as American Water Works Association, Water Environment Federation, Association of Metropolitan Water Agencies,

National Association of Water Companies, Association of Metropolitan Sewerage Agencies and International Water Association. The groups agreed "to maintain a consistent message in news releases, volunteer opportunities listings and specific material requests from international nongovernmental organizations (NGOs), local NGOs, communities and host governmental organizations."

"Water and sanitation are the most fundamental of all needs for all humans and every living thing. You have to have water or you die," Haws says. "Instead of reinventing the wheel, we got together and decided to gather the information. Each one brings a different expertise to the table. So many ad hoc committees and partnerships that are formed are nothing more than smoke and mirrors. For a partnership to work, each member has to bring some specific expertise and accountability to the table."

Through this partnership with WFP, members of the WQA now had an outlet for sending equipment or money specifically earmarked for water restoration in the tsunami-ravaged areas. Ferguson estimates WQA members donated in excess of \$10,000 to WFP and other relief agencies, though he stresses that it's hard to quantify because many of the member companies have a dozen or more branches, which in turn employ thousands more people, so it's impossible to know just how many people gave money, either on their own or through a workplace campaign.

Ferguson says the relief effort unfolded this way:

- **Tier One:** Immediately after the event, getting survivors to safety and treating the injured. The consortium members were not yet part of the response at this stage.
- **Tier Two:** Addressing the food and water issue. Initially, the only response was bottled water because the infrastructure was completely wiped out. But coincidentally, a WQA member had tested a product in India just a week before the tsunami that uses a powder to decontaminate water. The powder is added to a liter of water, shaken, and the contaminants fall to the bottom and the remaining water becomes drinkable. The product was dropped into even the most rural areas where helicopters could not land, with instructions in the native language. One packet was enough to provide water for a family of four for a day.
- **Tier Three:** A semi-permanent system. This is where WQA members really pulled together. Several of them sent large portable treatment units, which are self-contained units powered by gasoline, kerosene or electricity, if available. They can take even the roughest water and turn it first into potable water, then into high-quality drinking water, for as many as 7,000 people. Within a week, WFP had lined up two 747s to fly this equipment to the region. Toronto-based Zenon Consumer Products, a WQA member,

## RACE AGAINST TIME

*Andrew Warnes is director of international sales and marketing for Toronto-based Zenon Consumer Products, one of the WQA members that responded to the tsunami disaster. Warnes, former international director for the WQA, shares the perspective of a company that used its resources, local contacts and expertise to help restore fresh water to the region:*

Like much of the world, Zenon employees were on holiday when the disaster hit. Many were out of the office and it was not immediately clear how our skills could be applied to help. Over the next several days, as reports from the region began to emerge showing the horrific devastation and loss of life, it became clear that we might be able to do something. We wanted to make sure our donation would consist of the right technology in the right place with the right support. A key team at the company headquarters was assembled to work out the details. We immediately contacted our industry association, the Water Quality Association, to determine if there were any ongoing efforts in which we could participate. We also wanted to let the WQA know that we were prepared to work together with others should the opportunity arise.

In the first days after the disaster, much of the information was confusing or incorrect. We needed to find out if there was a real need for our technology, if our technology could function under existing conditions, if equipment could actually get into the affected areas, and if we could mount a structure for the installation and ongoing maintenance of the unit.

Key to our efforts was our ongoing relationship with World Vision, a nongovernmental organization focused on improving the lives of children around the world. World Vision already had more than 1,000 employees in the region and they were able to confirm that water treatment was going to be a need both immediately and for the long term. Also vital was our relationship with Eureka Forbes Limited, based in India (also a WQA member). Eureka Forbes has a 70 percent market share in residential water treatment in India and has service and support infrastructure throughout the region. The company readily committed the necessary logistics support, transportation and people. On Dec. 30, 2004, the WQA provided facilities for Zenon, World Vision and Eureka Forbes to hold the first of many daily conference calls to coordinate efforts.

Teams from Eureka Forbes found that the tsunami had poured seawater into wells, rendering them useless. It also overwhelmed municipal drinking water plants and ripped up distribution networks. Based on this information, World Vision determined that the relief camps away from the worst destruction would be the main focus. Displaced persons in the camps were receiving some bottled water from donors,

but many were drinking untreated water that was being trucked in and stored in tanks.

The hard part about any relief effort is being sure what is donated is truly needed. We had to have an accurate picture of the situation on the ground before we tied up valuable resources and took up precious cargo space on planes flying into the region. We also needed to be sure we had the infrastructure on the ground to keep the water flowing where it was most needed.

Once we knew what we were going to have to deal with, the Zenon Homespring units became a very viable option. These self-contained cylindrical units, which stand less than 6 feet high, make water biologically safe for consumption, without chemicals, by physically removing suspended solids, viruses, parasites and bacteria from the water. The portable units also are simple to operate and easy to service, which was key because we had no idea when additional flights into the area would be available for spare parts. They were even modified to operate without electricity.

The plan was to send 45 Zenon Homespring units to India and nine to Sri Lanka. The Indian units were flown

to Chennai in cargo space donated by Gulf Airlines; the Sri Lanka units were flown to Colombo in cargo space supplied by Alitalia Airlines. The units were all received in Asia by January 11 — only 12 days after the project launched.

#### LESSONS LEARNED

- 1 Local knowledge and representation is essential in any relief effort. This project could not have been completed without Eureka Forbes' assistance and knowledge of the bureaucratic requirements.
- 2 Matching local conditions with the appropriate technology is critical. Our units were relatively portable, simple to operate, and can be modified to function without electricity. These made them well suited for this mission.
- 3 An industry association like the WQA is most valuable when it provides an information and contacts clearinghouse for members who have the right resources to benefit the victims of a natural disaster.

I am happy to report that all of the water treatment units installed to-date by Zenon and Eureka Forbes are functioning and providing water to displaced communities in India. When community rehabilitation efforts are completed, these units will be re-deployed to schools and communities with the greatest need for safe drinking water.

Finally, I want to extend special thanks to Mr. P.J. Reddy, Dr. S. Muralidhara Rao, and Mr. S.K. Sankar from Eureka Forbes Limited, who led the relief efforts in India and Mr. Ryan of Abans Limited, Sri Lanka, who spearheaded projects there. ■



Photo by Jody Camp: Water For People

*"Our job is not to think about delivering a piece of equipment to a port; it's to think about the logistics in between. Our members had people on the ground in those regions, and we were able to talk to people directly in some of the affected areas within a day or two." — Peter J. Censky, Executive Director, Water Quality Association.*

sent more than 50 of its portable units to the region within days of the disaster [see sidebar for the complete story]. Andrew Warnes, director of international sales and marketing and former international director for the WQA, estimates his company spent about \$250,000 for equipment, personnel, travel, infrastructure, etc. It also gave some support to the Canadian military when it took a number of larger Zenon units to Sri Lanka.

"In short, the effort cost a lot. If asked, we would do it again," Warnes says. "The costs were steep, but we also gained an incredible education as an organization in how to mount a rapid disaster relief response. It's hard to assign a dollar value to what we learned, but it's easy to justify when the reports of successful installations started to come in from the field."

#### VIEW FROM THE GROUND

One such report came from P.J. Reddy, senior vice president, technical, for Eureka Forbes Ltd., a WQA member that was instrumental in getting those Zenon portable units to the region. He is based in Bangalore, India, an inland city of more than 5 million people about 180 miles from the tsunami-ravaged coast.

"Beautiful and exotic seashores can become such devastating locations for human life," he wrote in an e-mail interview. "It was so sad a situation. Many people who survived became helpless, homeless and they got separated from their loved ones."

Immediately after the tsunami hit, Reddy says he contacted

Reddy and others on the ground in Southeast Asia and those in other countries who were in a position to send supplies. Censky says in the end, that was perhaps the most important role for WQA — to be a facilitator.

"Our job is not to think about delivering a piece of equipment to a port; it's to think about the logistics in between," he says. "Our members had people on the ground in those regions, and we were able to talk to people directly in some of the affected areas within a day or two."

#### LESSONS LEARNED

Association professionals don't always have a solid benchmark for measuring the success of a plan or a program, but in this case, there is irrefutable proof: The potentially devastating waterborne illnesses never happened. Everyone involved agrees — without hesitation — that the reason for this success was the quick action and smooth cooperation of agencies and associations worldwide.

Haws, of Water for People, has worked in other areas hit by natural disasters, and she says the tsunami was unique in its magnitude and in the world's response.

"It was the greatest outpouring for a single event," she says. "The reason everyone worked so hard on this — unlike any other disaster, it wasn't just one or two or three countries. If you have an outbreak of cholera in India, it could be a disaster for the whole country. I think because the world responded financially and so many big donor agencies were there immediately because they knew the magnitude of what was going to happen, the response was phenomenal."

Ferguson adds that you cannot discount the role of the heartbreaking photos that flashed daily across television, newspapers and the Internet in motivating people to act.

"Our members continually said, 'We saw the pictures and it's horrible,'" he says. "You saw women in their saris — beautiful saris — stacking bodies. You can relate to that. It's one thing to see a soldier on a battlefield who's been shot; it's another to see a child or a wife who's died. That brought it all home."

The other component, Censky and others say, is that the response was orderly and logical — made with the head and not the heart. WQA had plenty of members ask if they could get on a plane and go to the stricken area, really with no idea what they would do once they got there.

"People are well-meaning and nice," he says, "but they don't realize they will become a burden on the health care system. You will get sick — you have no inoculations and you're an American who's never been exposed to these kinds of illnesses before. Even if you just went there on a holiday, you would get sick."

#### THE BEST LAID PLANS

Censky believes the key to WQA's success — and that of the entire consortium working with WFP — is that they already had relationships with people on the ground in the area hit by the tsunami. However, he does not believe associations need to spend their already-tight resources trying to plan for every possible disaster.

Instead, he suggests association professionals, particularly executives, be fully aware of what their profession is and what their members do, so when a disaster occurs that they might be involved in, a few calls can add up to a plan of action. It

## REACH ACROSS THE WORLD

The staff of the National Groundwater Association had just returned from a very successful annual meeting and were enjoying the quiet days between holidays when the tsunami struck southeast Asia. Cliff Treyens, director of public awareness, knew the association had a role to play as clean water became a central issue in the disaster, but the challenge was how to respond quickly and appropriately.

"It was clear from media reports pretty quickly that there already were serious problems with the lack of fresh water — people were drinking out of ditches," Treyens says. "We knew that the need would immediately exceed the abilities or capabilities of relief organizations to address it."

The association, headquartered in Westerville, Ohio, includes a range of groundwater experts, from geologists and hydrologists and engineers to ground water contractors, manufacturers, and suppliers of ground water-related products and services. Formerly the National Water Well Association, its membership includes more than 15,000 professionals around the world.

Treyens and his organization — working with a skeleton holiday crew — decided to put together an emergency well disinfection field guide that could be disseminated electronically to anyone who needed it. The document contains a simple five-step system of disinfection that uses bleach or powdered calcium hypochlorite. It also included two charts showing how much of the chemicals to add to the water, and was useful for both the shallow and wide hand-dug wells as well as the narrow and deep drilled wells.

John H. Schnieders, FAIC, CPC, the principal chemist of Water Systems Engineering, Inc., took the lead and was able to have the whole guide completed and released in about a week.

"On short notice, we got feedback from a dozen people," Treyens says. "We tried to take a far from perfect situation and

come up with the best possible approach to disinfecting wells. The other key thing is that we didn't want to assume that the person on the scene trying to aid the problem had any expertise at all. We wanted to put together something that anybody could follow and have a reasonable chance of disinfecting that well.

"People were thirsting and in a perilous situation, facing waterborne disease. It wasn't like we could sit around and endlessly debate it," he says. "We took the most responsible course possible."

Thanks to the Internet, Treyens says the guide was sent to as many outlets as possible. NGWA first targeted existing organizations that either were involved in the relief effort or that could disseminate information quickly. Treyens then spent some time each day for a few weeks searching the Internet for more outlets. It was posted on the Water Quality Association Web site, as well as numerous other water-related and relief agency sites.

While it's impossible to know how many people used the guide, Treyens shares this message from a Sri Lankan living in the United States: "I have my family in Sri Lanka and am in constant touch with them. This information will be very useful and I will pass this to a couple of Web sites that I know are looking for this type of information. Actually, I am involved with a group of expatriates working to clean the domestic wells in the affected areas. I will pass this information along."

While nobody at NGWA planned for this kind of project during what's usually a slow period, Treyens says it was well worth the effort.

"We had a lot of members who that contacted us, wanting to know what they could do and if we were doing anything," he says. "It was great to be able to say that in fact we were doing something."



Zenon Homespring water filtration units being received at the World Vision supply depot in Chennai, India. Photo courtesy of Jonathan Lieberman of ZENON Environmental.

his colleagues in Chennai, one of the affected areas, and learned that no friends or colleagues had been injured. The next step was to begin working with Zenon to bring in the portable units. He credits the initial supplies of bottled water and the swift arrival of the units with keeping waterborne illnesses from becoming an epidemic.

"In calamities of this nature, there is every possibility of the intrusion of dead and decaying organic matter into wells and ponds," he says. "These two major and timely actions resulted in avoiding the outbreak of any waterborne diseases."

Every single step of the response was coordinated between



Dr. S. Muralidhara Rao of Eureka Forbes participates in the inauguration of the system installed at Nemmelikuppam, India. Photo courtesy of Jonathan Lieberman of Zenon Environmental.



A girl drinks a cup of clean water in the village community of Bagpara outside of Calcutta, India. Photo by Nancy J. Haws: Water For People



Tsunami relocation camp in Nagapattinam, India. Photo courtesy of Jonathan Lieberman of Zenon Environmental.



Life goes on around the installation of a Zenon Homespring unit in Nagapattinam, India. Photo courtesy of Jonathan Lieberman of Zenon Environmental.

helps to have a relationship with a relief or development agency, such as Water for People, that has resources on the ground in most parts of the world and can alert you and your members to where help is needed most — and what kind.

"The next issue is not going to be a tsunami," he says. "It might be an earthquake or a volcano or who knows what? It might be a manmade disaster. How do you plan? We cannot possibly anticipate every disaster." ■

**THE JULY 2005 SIGNATURE STORY** will focus on a regional trade association's crucial involvement with a huge coalition of over 30 other organizations. Learn how the coalition was formed and how so many groups banded together to successfully block legislation — a supplement to workers compensation — that would have negatively affected both their members and consumers. The coalition still thrives today, addressing potential reforms to workers comp itself. The Mechanical Contractors Association, Chicago, Ill., is a 501 (c)(6) with just 67 members, seven staff and a budget of \$2.1 million. Visit [mca.org](http://mca.org) for additional information.