



## **INTERNATIONAL AID (in collaboration with Cascade Engineering) LAUNCHES GLOBAL SAFE WATER INITIATIVE**

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### **International Aid (in collaboration with Cascade Engineering) Launches Global Safe water Initiative, Unveils Portable BioSand Filter For Use In Developing World**

- **New University of North Carolina study finds BioSand technology yields significant health impact**
- **Dow among donors funding research into new filter's use in Africa, Central America, Asia**
- **First International Aid filters arrive in Dominican Republic and Honduras**

SPRING LAKE, Mich., March 19, 2007 – Leading humanitarian healthcare agency International Aid today announced a major safe water initiative that will help address the growing health crisis caused by lack of access to clean water in developing countries worldwide. As the centerpiece of its safe water program, the agency introduced a new, lightweight water filter that combines a proven filtration technology, known as BioSand, with an innovative plastic design. International Aid believes the simplicity and affordability of the new unit have the potential to make a dramatic impact on the global water crisis.

The agency announced its new initiative in advance of the United Nations' *World Day for Water 2007*, which will be observed on March 22 to help build awareness of water's critical importance to life and health. International Aid is responding to a health crisis of enormous proportions: recent reports note that more than 10 million people – half of them children and teens – die annually from diseases due to unsafe drinking water; in developing countries, 70 percent of poor people lack access to treated water.

International Aid's new filter – developed in collaboration with Grand Rapids, Mich.-based Cascade Engineering, a leading provider of engineered plastics products and systems – involves a major design improvement to the traditional BioSand water filter that is currently in use in more than 70 countries worldwide. The existing filter, invented by David Manz, Ph.D., of the University of Calgary, Canada, is constructed using concrete and typically weighs more than 300 pounds. International Aid's new lightweight version weighs less than 15 pounds, making it far easier to transport and distribute in rural areas and remote locations.

As part of its announcement, International Aid also cited the release today of preliminary data from a recently completed health impact study, conducted in the Dominican Republic by researchers from the University of North Carolina at Chapel Hill, that examined the effectiveness of BioSand technology in reducing diarrheal disease, a leading cause of death in the developing world. The [24-month] study, led by noted epidemiologist Mark D. Sobsey, Ph.D., found that the use of the concrete BioSand water filter achieved disease reduction of more than 50 percent among the total study population and in children under five years of age. These initial findings suggest BioSand technology is comparable in its effectiveness to other water treatment technologies that have been documented to improve microbiological water quality and health.

To supplement these findings, International Aid also announced today that Midland, Mich.-based Dow Chemical Corporation will fund a new study designed to test the effectiveness of International Aid's plastic version of the BioSand filter in Ghana, West Africa. This study – the first of three research initiatives International Aid intends to sponsor across three continents – will examine both the filter's ability to improve water quality and the ability of local communities to successfully adopt the new technology. Drawing on the support of an anonymous donor, International Aid will shortly launch a plastic filter study in Central America, and it expects to pursue similar research in Asia in the near term.

"Those of us who work amid the devastation caused by unsafe water know all too well there is no silver bullet for solving the world's water crisis," said Myles D. Fish, International Aid's President and CEO. "But today, encouraged by compelling new research, the support of our sponsors, and the promise of our new lightweight water filter, International Aid is taking an important step in addressing this crisis. In leveraging our extensive global aid network and partnering with organizations that share our mission, we hope many others will take notice and help magnify our new campaign for safe water."

"Dow is delighted to sponsor a key BioSand water filter trial," added Scott Noesen, Dow's Director, Sustainable Development. "This contribution supports Dow's '2015 Meeting World Challenges' Sustainability Goal, which involves Dow's commitment to achieve breakthroughs that significantly improve the world's capability to meet major challenges, such as supplying clean drinking water. Dow

is pleased to facilitate a thorough test in Africa of the new filter's design and help add an improved tool to the world's capability to supply clean drinking water."

### **IA Safe Water Initiative**

International Aid's plastic BioSand filter is a core element of the agency's broader safe water initiative, which also includes plans for providing education to help communities change their behaviors through improved hygiene instruction and providing prescription drugs to treat waterborne diseases. In addition, International Aid intends to help create indirect social benefits from its water program by fostering local micro-businesses dedicated to the water filter's ongoing operation and maintenance.

International Aid's safe water initiative is a natural extension of the agency's larger mission, which is focused on providing healthcare solutions during major humanitarian relief efforts and in an array of ongoing development projects that involve community-based healthcare, disease treatment and prevention, and linking the resources provided by the agency's corporate and church partners with people in need.

"International Aid's safe water initiative is both a relief effort and development program, and is therefore an excellent illustration of how we work to fulfill our mission," continued Myles Fish. "We're leveraging our deep relationships among corporations, churches, and other humanitarian groups to fund and develop an important healthcare solution here at home, and distribute it to far-reaching communities overseas. Our continued appeal is for those who share our vision to offer their resources at both ends of this important aid channel."

### **IA Plastic BioSand Filter**

International Aid is exclusive holder of the worldwide humanitarian license for the plastic BioSand filter. An injection-molded, non-electric device with no moving or replacement parts, the new filter can provide clean, safe water at the rapid rate of one liter per minute and meet all of a family's water needs, including drinking, bathing and washing clothes. Designed in partnership with Cascade Engineering, which is also manufacturer of the unit, International Aid's plastic filter incorporates BioSand technology currently in use in more than 300,000 concrete filtration systems worldwide.

The BioSand method removes pathogens from water through a combination of biological and mechanical processes. The filter itself comprises a plastic container enclosing layers of sand and gravel, including a surface layer of sand that is infused with bacteria-consuming micro-organisms during the filter's initial preparation. Water is poured into the top of the filter as needed, where the first, biological layer consumes pathogens before the water travels through the additional layers of sand and gravel. As it collects at the base of the filter, the water is propelled out of the filter through plastic piping attached to the unit's exterior.

### **About International Aid**

International Aid is a leading Christian relief and development agency that provides and supports solutions in healthcare. Over the past decade, International Aid has responded to more than 100 man-made and natural disasters – including 9/11, Katrina and other major U.S. hurricanes, the South Asian tsunami and Pakistan earthquake – and has delivered more than \$500 million in relief supplies to 170 countries. In addition to its high-profile relief work, International Aid is heavily involved in multiple development efforts focused in the areas of community-based healthcare; disease treatment and prevention; and leveraging the agency's network of ministry partners to provide products, equipment and knowledge-based services to people in need worldwide.

Editor's Note: IA President and CEO Myles Fish and the agency's partners are available for media interviews. IA has made additional safe water resources available – including video b-roll, photography, fact sheets and other water-related sources – at [www.internationalaid.org/press](http://www.internationalaid.org/press).