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Press Release

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FOR IMMEDIATE RELEASE

Water For People Wins Prestigious Grainger Award for Arsenic Removal Innovation

(Denver, Colo.)—March 26, 2007—Water For People was awarded a prestigious Grainger Award by the National Academy of Engineering (NAE) for its innovative work in arsenic removal from potable water in the West Bengal region of India, where millions of people are at risk from naturally occurring arsenic that is prevalent in the groundwater supplies.

The NAE, with the generous support of The Grainger Foundation, awarded Gold, Silver, and Bronze awards of \$1,000,000, \$200,000, and \$100,000, respectively, to the winning systems. Water For People shared the Silver Award—and a \$200,000 prize—with Lehigh University, which collaborated on the development of the sustainable arsenic removal technology that is being applied by Water For People in India. Members of the development team included Arup K. SenGupta, John E. Greenleaf, Lee M. Blaney, Owen E. Boyd, and Arun K. Deb. Also, Sudipta Sarkar, a post doctoral associate, and Prasun Chatterjee, a doctoral student, both currently working in Prof. SenGupta's laboratory at Lehigh University, made significant contributions during the performance evaluation of the engineered system.

Dr. Arup SenGupta and Lehigh University partnered in the submission of the application for the Grainger Award. Dr. SenGupta and his research assistants built a model of the filters that are used in West Bengal, India so that NAE could test the filter under laboratory conditions. Dr. SenGupta worked with Bengal Engineering and Science University in India to develop the technology that is being used by Water For People in West Bengal, India. The technology continues to be improved with an increased operational simplicity and minimal environmental impact.

The award was presented at a gala celebration in Washington, DC, on February 20, 2007. Patrick McCann, president and CEO of Weston Solutions, Inc. accepted the award on behalf of Water For People and its Board of Directors. Water For People will use its \$100,000 share of the prize to expand its arsenic abatement efforts in India. Prof. SenGupta will continue his research efforts to further enhance the efficiency of the arsenic removal systems and install similar community based systems in arsenic affected regions in Mexico and Bangladesh.

The system developed by Water For People and its collaborators is being applied at community wellheads throughout the West Bengal region. Water is hand-pumped into a fixed-bed column, where it passes through activated alumina or hybrid anion exchanger (HAIX) to remove the

arsenic. After passing through a chamber of graded gravel to remove particulates, the water is ready to drink. Each arsenic removal unit serves approximately 300 households. The system is used in more than 160 locations in West Bengal, India providing arsenic-safe potable water to nearly 170,000 villagers in West Bengal.

The filters are installed on top of arsenic-tainted wells where villagers have no other source of drinking water besides arsenic-laced groundwater, ensuring that the people in remote villages in West Bengal will continue to have safe drinking water supply. Arsenic removal units are manufactured using solely indigenous materials in cooperation with Bengal Engineering and Science University. Villagers are responsible for their upkeep and day-to-day operation. The active media are regenerated for reuse, and arsenic-laden sludge is contained in an environmentally safe manner with minimum leaching.

The 2007 NAE Grainger Challenge Prize competition sought innovative solutions for removing arsenic from drinking water that is slowly poisoning tens of millions of people in developing countries. The winning systems had to be affordable, robust, reliable, easy to maintain, socially acceptable, and environmentally friendly. As sustainable technologies, they also had to be within the manufacturing capabilities of the countries in which they are deployed and could not degrade other water quality characteristics. The prize winners were recognized for the development, in-field verification, and dissemination of effective techniques for reducing arsenic levels in water. All of the winning systems met or exceeded the local government guidelines for arsenic removal and require no electricity.

The National Academy of Engineering (www.nae.edu/nae/naehome.nsf) sponsors the annual Grainger Award, an international competition to recognize the best new technology for treating arsenic-tainted drinking water. The competition and judging took about 18 months to complete and involved an in-depth testing of the technology in an independent laboratory.

The first place award went to Abul Hussam, a professor at George Mason University for his household treatment technology. The third place award went to Procter and Gamble for their Children's Safe Water Drinking Program which uses PUR, a coagulation and flocculation agent that removes bacterial and chemical pollutants from the drinking water.

About Water For People

Founded in 1991, Water For People is a Denver-based private, nonprofit international development organization that supports safe drinking water and sanitation projects in developing countries. Water For People partners with communities and other nongovernmental organizations to help people improve their quality of life by supporting sustainable drinking water, sanitation and health and hygiene projects. Water For People supports projects with professional development advice, financial support and volunteer technical services. Typical projects include protected spring-fed community water systems, gravity-fed systems, wells with hand pumps, latrine construction, operator training and health and hygiene education. Water For People is currently working in Latin America, Africa and Asia. In 2006, Water For People supported the provision of safe and sustainable drinking water resources and/or sanitation facilities benefiting more than 89,000 people in the developing world. More information is available at www.waterforpeople.org.

Photo caption:

Accepting the Grainger Challenge Silver Award at the National Academy of Engineering Gala on February 23, 2007, in Washington, DC are (from left), William Hayden, Grainger Challenge Foundation; Lee M. Blaney, Lehigh University; Arun K. Deb, Water For People; Patrick McCann, Water For People; Owen E. Boyd, SolmetiX Co.; John E. Greenleaf, Lehigh University; Arup K. SenGupta, Lehigh University; and Bull Wulf, NAE.

Photo caption: An Indian woman gathers arsenic-free water at a tap stand in West Bengal, India. Water For People has installed arsenic filtration units in more than 160 locations in the region.