



## FOR IMMEDIATE RELEASE:

### QuakeWrap, Inc. awarded rehabilitation of 1.1-mile pipeline in Costa Rica

**Tucson, Arizona, July 1, 2009** — QuakeWrap, Inc., a Tucson, Arizona, based company, announced today it was awarded a contract with Ghella S.p.A. for rehabilitation of a 1.1 mile (1.7km), 7ft (2.1m) diameter, pressurized pipeline approximately 70 miles outside San José, Costa Rica, utilizing QuakeWrap's award-winning FRP system. Ghella is a major construction firm based in Rome, Italy, with branch offices across Latin America and in the United States; Ghella is finishing construction of the El Encanto Power Generating Facility outside San José, Costa Rica.

QuakeWrap's work includes lining the inner surface of the entire pipeline. The line conveys river water under pressure from the source to the power generating units at El Encanto. Due to problems in the structural design, the pipeline developed longitudinal fissures that extend the length of the pipeline; these fissures caused major leaks upon pressurization of the pipeline. Upon completion of the project, QuakeWrap's innovative solution will increase the original design pressure of the pipeline by approximately 90%, with superior corrosion resistance and waterproofing properties.

The FRP installation started in mid-June and is scheduled for completion in mid-July; QuakeWrap is ahead of schedule and plans completion a few days early, minimizing down-time even further. This is thought to be the largest in-place, full structural and waterproofing rehabilitation project of its type. Costs and stringent time constraints prohibited conventional methods for reinforcing or reconstructing the pipeline. QuakeWrap is installing a solution using Fiber Reinforced Polymer (FRP) products. FRPs are sheets of high-strength carbon or glass fibers. Applied like wallpaper, they become stronger than steel in 24 hours.

The high structural performance, flexible application, and very short installation time of FRPs made them an ideal solution for the rehabilitation of the El Encanto pipeline. Layers of fabric are used to strengthen and waterproof the inner surface of the pipeline. Less than 1/8" thick, the fabrics comprise a negligible loss of inner diameter, and will not detract from the pipeline's designed flow capacity.

QuakeWrap has won numerous awards from prestigious institutions like the International Concrete Repair Institute (ICRI) for repairing and retrofitting structures of different types using FRP applications. One such award was for a similar pipe retrofit project at a U.S. coal-fired power plant. QuakeWrap's solutions have caught the attention of international media in the past, including a feature on the History Channel's *"Back to the Blueprint"* program.

#### **About QuakeWrap**

QuakeWrap Inc. is a leading designer, supplier and installer of quality, innovative Fiber Reinforced Polymer (FRP) products for repair and strengthening of structures. The company is also a pioneer research and development firm committed to providing economical solutions and unparalleled service to engineers, architects, and owners.

QuakeWrap's system is made up of flexible fabrics composed of carbon or glass fibers, a high-viscosity tack coat, and a saturating resin. FRPs are used in structural strengthening as well as in protecting against moisture intrusion and corrosion. They are extremely easy to install, and can be used without removing the existing structure. The ease and speed of installation almost always make FRPs a more economical alternative in retrofits and renovations.

QuakeWrap was founded in 1994 by Dr. Mo Ehsani, an internationally recognized expert and researcher in the use of FRPs and a professor of structural engineering at the University of Arizona. Dr. Ehsani has been featured on CNN, The History Channel, National Public Radio, and in other media, including Engineering News Record (ENR), for his expertise on the strengthening of structures, particularly related to earthquakes, terrorist attacks and other potential structural disasters.

For more information on QuakeWrap Inc. and its products, please contact Joyce Ryan at 520-791-7000 x121 or at [office@quakewrap.com](mailto:office@quakewrap.com) or visit <http://www.QuakeWrap.com>.

***"Stronger than Steel"***