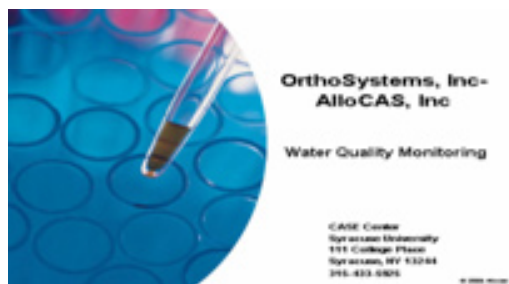


TECHNOLOGY APPLICATION AND DEMONSTRATION (TAD) AWARD

FUNDED BY THE U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)
ADMINISTERED BY THE SYRACUSE CoE OFFICE FOR INDUSTRY COLLABORATION (OIC)



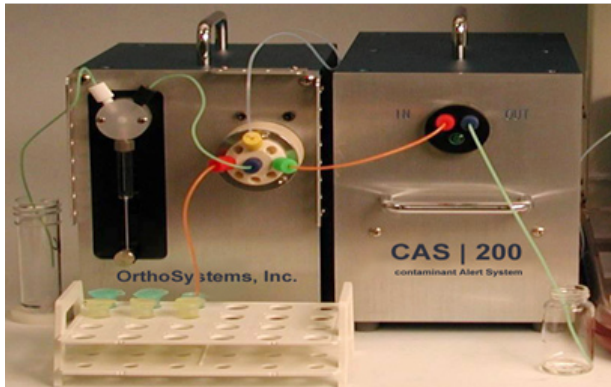
PROJECT TITLE	A Distributed System for Water Quality Monitoring
AWARD RECIPIENT	OrthoSystems, Inc., AlloCAS Division 2-212 Center for Science and Technology 111 College Place Syracuse, N.Y. 13244 (www.orthobiosystems.com) (www.allocas.com)
PROJECT DIRECTOR	Peter E. Kent, P.E., President
GRANT AMOUNT AWARDED	\$150,000
PROJECT TERM	2007 - 2008

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PROJECT SUMMARY



The goal of the project is to produce an automatic Contamination Alert System (CAS)[™], or CAS-300, to detect E. coli and total coliform bacteria in water. These bacteria are common in the environment and would normally be easily killed by the chlorine disinfectant found in water. The Environmental Protection Agency (EPA) requires that water systems be sampled monthly from one to 480 locations in each system to check for the existence or absence of the bacteria. If the bacteria are found, it may indicate that the water has lost its residual chlorine, or that there is a breach in the pipe

that is allowing groundwater to enter the system. The EPA also requires that the same test be performed on the water at beaches that are open for public swimming.

The CAS-300, an automatic, lab-in-a box system, is designed to perform the test automatically and unattended. The encrypted results are then sent to a central monitoring location via the Internet. The system is designed to eliminate the need for a person to collect the sample and take it to a laboratory, and will offer results in 18 hours. The system can be located in many different locations, from the basements of schools, hospitals or public buildings throughout a city to a shed at a beach. The contamination data can be displayed on a city map as contour lines to allow quick analysis.

The CAS-300 unit is expected to prove to be a less expensive and more efficient method of obtaining E. coli and coliform bacteria test results. As the EPA currently requires monthly E. coli tests at approximately a half-million locations around the nation, there are potential sales of that many systems in the United States alone.

OrthoSystems, Inc.'s test reagent and laboratory procedures have been approved by the EPA. The company's goal is to have a working prototype by May, laboratory testing completed by July, EPA approval by December and commercialization of the product by March 2008.

Prior Funding: New York Indoor Environmental Quality Center, administered by the Metropolitan Development Association

Department of Defense, administered by the SUNY College of Environmental Science and Forestry and Source Sentinel

National Institutes of Health

Department of Homeland Security

Laboratory space and access to equipment provided by Syracuse University and the CASE Center