

## Summary

dTEC Systems L.L.C. is seeking a partner to license its EnvESI™ technology developed for the chemical testing and monitoring of stormwater, wastewater, and drinking water. This technology has a number of significant advantages over most of the presently used multi-parameter analytical instruments and sensors including its portability, relatively low cost, and ability to continuously monitor a large number of chemical pollutants in real time.

## EnvESI™ Highlights

- EnvESI™ generates test results almost instantaneously allowing for real-time online water monitoring and completely eliminates or reduces sampling labor costs.

- Can be packaged into a relatively low-cost portable instrument.

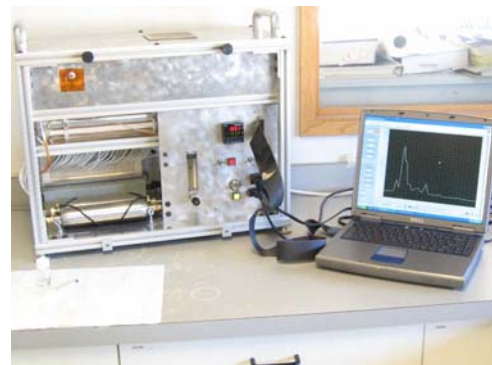
- Simultaneously measures concentrations of the typical inorganic and some typical organic chemical water contaminants and serves as a screening tool for the unexpected contaminants (such as in drinking water security applications).

- In most applications, does not require sample preparation, test reagents, or other consumables.

- EnvESI™ is aimed at the following US markets and customers: stormwater and combined sewer overflow facilities that routinely test their water discharges (those governed by EPA NPDES program), wastewater treatment plants for effluent monitoring and process control (especially SNdN process plants), and large public drinking water systems for testing compliance with the EPA drinking water standards and monitoring security.

- May become a dominant measurement technology in various water-related fields due to its unique capabilities such as simultaneous and accurate nitrate/nitrite measurements.

dTEC Systems L.L.C. has built two working prototypes implementing EnvESI™ technology. The prototypes demonstrated detection levels below the EPA regulatory levels for drinking water contaminants for at least five of the tested pollutants (nitrate, nitrite, chloride, sulfate, and zinc). Many other pollutant were detected with EnvESI™ (including arsenite, arsenate, phosphate, pentachlorophenol, lead, copper, bromide, fluoride, hypochlorite, ammonium, sodium, cadmium, chromium, and mercury), however more work is required to evaluate the corresponding detection levels, stability and accuracy.



**EnvESI™ System Prototype**

## Company Information

dTEC Systems L.L.C. was formed in 1999. The primary focus of dTEC Systems is to develop detectors, sensors, instruments and systems for monitoring and control in water and wastewater treatment processes and other sample matrices relevant to environmental quality. Our objective is to transfer technologies from emerging disciplines in analytical chemistry and related engineering fields to develop innovative applications for addressing problems and opportunities that we have identified through our extensive previous work experience.