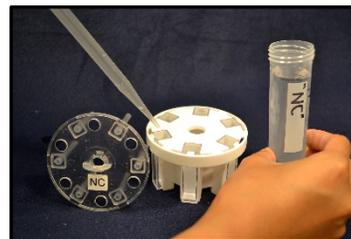


Background on Assure Controls

Assure Controls, Inc. was founded to commercialize proprietary United States Navy technology. The USN federal research laboratory in San Diego, California spent almost 10 years testing the feasibility of using live organisms as an indicator of environmental conditions. The Office of Naval Research funded programs totaling \$2.5 million for the research and development efforts, received patents from the US Patent Office (USPTO), and international standards acceptance from the American Society of Test and Measurement (ASTM). The proprietary test indicates if water samples



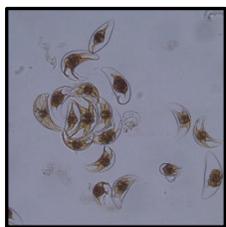
contain biologically harmful levels of inorganics, organics or heavy metals (and all combinations of these). Like a canary a coalmine, they are “bio-sensors” of harmful



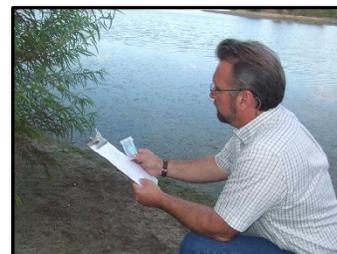
substances revealing test results in hours not days. No other live biological test is on the market in a single use disposable

kit. The technology (under the trademarked name “QwikLite” Biosensor System) was declassified and made available for transfer to commercial non-military use.

When made aware of the commercial opportunity, founder and CEO, Mr. Bryan Bjorndal, on behalf of Assure Controls, received the exclusive rights to the technology, and applied his over 20 years of experience in medical devices and industrial biotechnology companies (HP, Puritan-Bennett and Genetronics) to the development of a convenient product line.



Along with the Board of Directors, the company has raised approximately \$3.2 million (2006-2015) and with those funds, Assure Controls developed the lowest cost, biological, rapid water quality test instrument; and with their experience in ballast water (2012-2016) has a portfolio of BW application-specific products, and services. Assure Controls, Inc. is a California “C” corporation with offices in Carlsbad, California. U.S.A.



Assure Controls won “Gold Trophy” at the World’s Best Technology competition in Dallas (2007) and received “Most Outstanding Commercialization Award” from the Federal Laboratory Consortium for the QwikLite instrument and test kits.



QwikLite 200 & Test Kit

Issued Patents: # 8,637,303 "System for Measuring and Analyzing Properties of Water and Sediment Samples (issued 2014), # 7,964,391 Automated Field-Portable System for Conducting Toxicity Measurements in Waters (issued 2011), # 7,838,212 Apparatus and Method for Providing Live Dinoflagellates for Toxicity Tests (issued 2010), # 7,704,731 System and Method for Quantifying Toxicity in Water, Soil, and Sediments (issued 2010), # 5,840,572 Bioluminescent Bioassay System (issued 1998), # 5,565,360 Bioluminescent Bioassay System (issued 1996)

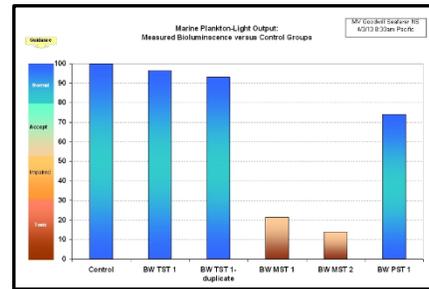
Experience in the Ballast Water Market: Over the past four years the company focused on BW treatment testing requirements due to its unprecedented position as the only marine live species that is ready to use for testing of the toxicity levels on treated ballast water discharges. Beginning with the Deep Horizon oil spill (2010), where over 600 of our tests were done shipboard, the experience provided the momentum to redefine remote and rapid marine toxicity testing.



In 2011, 2012, 2013, and 2014 our testing experience continued its shipboard and maritime presence; used in the evaluation of ballast water for several BW treatment systems (BWTS) under development. In collaboration with five government agencies and the US Geological Survey (USGS Seattle, WA), in 2012 Assure began the first large scale testing of ballast water (100 ships). Assure has visited IMO Type Testing facilities, US Coast Guard approved test facilities, and completed market assessments for innovative BW treatment approaches.



As a member of the Pacific Ballast Water Group, stakeholders from the western coastal states, Assure Controls engages in comparative BW management practices. Assure Controls has participated in scientific, technical and regulatory conferences in Istanbul, London, Singapore, and Long Beach; and advised on ballast water practices in Panama. The company is a member of the IMarEST BW Expert Group, and the IMO Expert Group on Contingency and Emergency BW Approaches.



Assure Controls has customized compliance information, services and tools to provide rapid testing of marine vessel ballast water commercializing for the burgeoning industry in Ballast Water Management. The market for maritime testing will develop rapidly in 2015-2020, however the present methods of expensive and time-consuming trips to a specialized laboratory (i.e. days) will not be able to meet the demand or requirements of the new international regulations affecting over 60,000 vessels that must be outfitted with ballast water treatment systems. Assure Controls offers a unique means to partner with the installed BWTS systems on vessels, so that **performance testing** data as well as **crew compliance documentation** is available for review with port authorities.

Visit www.TheBallastWaterChannel.com



Personal



Port



Premium



Headquarters for Assure Controls is at The Technology Career Institute (TCI) facility in Carlsbad, California. The company is proud to be the “maritime showcase company” at the TCI facility, located at 2075 Las Palmas Drive, Carlsbad. This is unique program offered by Mira Costa College, with 100-120 students/year attending certificate programs. At the core of the curriculum are many technologies and courses that are associated with water or the ocean. Assure Controls has onsite offices and a small laboratory, to provide the college students and faculty with a commercial example of maritime technology and applied methods.



In developing the program, MiraCosta worked closely with industry leaders to create the curriculum to meet businesses’ growing needs, and offers accelerated 12-to-16-week programs where students are immersed in a hands-on, skills-based environment. TCI is designed to provide skilled workers for such industries as high-tech manufacturing, maritime technology, and biotech manufacturing.



The TCI trains workers to fill a growing demand for industrial technicians in North San Diego County. The courses are accelerated 12-to-16-week programs where students are immersed in a hands-on, skills-based environment. MiraCosta has worked closely with industry leaders to create the curriculum to meet businesses’ growing needs, and graduates enter the workforce with skills that help them find well-paying jobs and advance their careers. TCI is designed to provide skilled workers for such industries as high-tech manufacturing, maritime technology, and biotech manufacturing.



Assure Controls is a marine technology company with advanced measurement capabilities for water quality assessment using biosensors and other combinations. The proprietary technology was licensed from the US Navy, modern instrumentation and disposable test kits with live marine plankton are used as sensitive environmental indicators. Mechanical, electrical, biological and software components are used in this process.

TCI uses this company partnership with industry as an on-site showcase opportunity. It is helpful to have Assure Controls as an example of interesting technology, as well as experience in the industry.

Assure Controls serves as a good guest lecture, real world exposure to TCI students and staff. Assure Controls tries to foster relationships within the San Diego area “**Blue Tech**” and “Clean Tech” industries for TCI staff, and is also on the Mira Costa College Biotechnology Industry Advisory Boards.

