

AquAffirm announces commencement of foundation-funded arsenic pilot project in Bangladesh

Portable smartphone-enabled system with cloud-connectivity being piloted across five affected regions enabling real-time measurement and mapping of arsenic levels in drinking water

Funded by Dutch foundation Aqua for All in association with UNICEF and DPHE

Announcement dated 19th January 2024

LONDON, UK – AquAffirm Ltd is delighted to announce that it has commenced a major pilot project to validate its portable cloud-connected AquAffirm™ digital sensor platform in Bangladesh, one of the countries most affected by naturally occurring arsenic. The AquAffirm-As™ is the first portable digital cloud-connected sensor for arsenic that works off a standard (Android) smartphone.

Affecting over 140 million people in at least 50 countries worldwide, arsenic is particularly debilitating in Bangladesh where it affects 20-50 million people, causing significant morbidity, including skin lesions, cancers, and cognitive development issues, leading directly to the death of tens-of-thousands each year.

The AquAffirm™ platform uses an innovative smartphone-enabled design that includes disposable test strips, mobile app and web-connected software platform developed by the AquAffirm team. In this pilot project the teams will be assessing the usability and performance of the AquAffirm-As™ test by measuring and mapping tube wells in arsenic-affected areas across Bangladesh.

The pilot project is supported by Dhaka University, UNICEF and the Department of Public Health Engineering (DPHE), the Bangladeshi agency responsible for addressing the arsenic issue in rural areas. It involves seven independent testers from Bangladesh who have been recruited by Dhaka University to conduct the testing and collect samples for laboratory testing. A final workshop will be held near the end of the project to report on results and raise awareness.

“We’re excited to have achieved this important milestone in the development of the technology and to be working with a team which includes experienced researchers and professionals from Dhaka University, UNICEF and DPHE,” commented Dr David Sarphe, AquAffirm CEO. “We are also thankful for the significant support from *Aqua for All*, the Dutch foundation that is partially funding this project. We’ve been to affected regions of Bangladesh numerous times to observe the debilitating effect of arsenic on the population. We are confident our system, once fully deployed, will make a significant impact by providing a new tool that will drastically improve management and mitigation of the arsenic problem in Bangladesh and, indeed, in other affected areas.”

About Arsenic

Arsenic affects over 140 million people in at least 50 countries, including an estimated 20-50 million in Bangladesh. Long-term exposure can lead to a variety of chronic health conditions, including skin disorders, cancers of the lung and bladder as well as cardiovascular issues, directly leading to hundreds of thousands of deaths globally each year.

About Bio Nano Consulting

Bio Nano Consulting (BNC) is a best-in-class technology and strategic consultancy focusing at the interface between bio-, nano- and digital technologies, providing project management, product development and strategic consultancy to a range of international clients from industry, academia and government. BNC is a wholly owned subsidiary of AquAffirm Ltd.

About AquAffirm

AquAffirm develops proprietary digital tools/services to help clients from industry and the water sector reduce their environmental impact and improve sustainability. Specifically, AquAffirm is commercialising innovative digital smartphone-enabled point-of-use sensors and software platforms to help clients manage critical water infrastructure networks, control unwanted environmental contaminant release, and monitor/map environmental impact. As a service, AquAffirm also develops bespoke digital sensors specifically for its clients’ needs. AquAffirm’s long-term vision is to build a mobile-enabled network of sensors & software for water sustainability to include the most

advanced digital water contaminant measurement platform for rapid measurement, monitoring and mapping of contaminants at the point-of-use.



AquAffirm™ sensor platform:



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