



Press Release

23 January 2014

Bluewater Bio International

("BwB" or the "Company")

Bahrain Site Visit Celebrates Successful Performance Testing of HYBACS Upgrade
80% more nitrogen removal, 40% power reduction & 40x better sludge settling at Tubli sewage works

On Thursday 23rd January Bluewater Bio International, an award winning provider of high-performance, cost-effective water and wastewater treatment technologies, hosted a site visit to Tubli Water Pollution Control Centre ("WPCC") in Bahrain, to celebrate recently-completed performance testing of its HYBrid ACTivated Sludge ("HYBACS[®]") wastewater treatment upgrade.

In recognition of Bluewater Bio's UK roots and its export success, the site visit was included by the UK Embassy in their programme for Great British Week (www.yallabahrain.com), during which the Company also exhibited at the Advanced Engineering & Innovation Expo on Saturday 18th January.

Welcoming 35 guests from as far afield as Australia, Canada, China and South Africa, Daniel Ishag, founder and CEO of Bluewater Bio, said: "Bluewater Bio is immensely proud to have been selected by the Bahraini Ministry of Works for their 8.75 million Dinar wastewater upgrade at Tubli. Thank you to our Ministry clients here today, and also to our champions within the UK Government who helped us build the necessary relationships across the Bahraini government."

During the visit Bluewater Bio's Project Manager, Bashar Muhtadi, presented the challenges that dictated the upgrade in sewage treatment capacity, while Technical Director, Dr. Jeremy Biddle, outlined the HYBACS plant's performance. The visit also included a real-time demonstration to illustrate the vastly improved sludge settling of effluent from the two HYBACS lanes, compared with effluent from the eight lanes not yet upgraded.

Jeremy added: "During commissioning in September and October, the HYBACS plant at Tubli treated 20% more flow than its design average and nitrified fully, whilst demonstrating substantial power savings of up to 40%. Our upgrade has subsequently passed performance

testing with no failures, despite very high influent COD loads. But don't just take my word for it; I couldn't put it better than the ministry themselves", who said:

"The HYBACS upgrade at Tubli alleviates the current overloading problem without the requirement for green-field construction, thereby utilising the existing secondary treatment assets whilst avoiding additional land take. Early results demonstrate that the plant is operating exceptionally well and meeting the highest standards, with an overall improvement in nitrogen removal of 80%".

With performance testing completed on 6th January 2014, Bluewater Bio has entered a one year operation and maintenance contract at Tubli WPC.

Daniel Ishag concluded: "Now fully commissioned, the HYBACS upgrade at Tubli is, as you have witnessed today, consistently outperforming all the Ministry's specifications and expectations. As such it provides a compelling reference site for Bluewater Bio to showcase with current and future partners across the globe."

– ENDS –

For a copy of the site visit presentation and photographs from the day, please contact:

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About Bluewater Bio

Bluewater Bio ("BwB") is an award winning specialist in the cost effective treatment of water and wastewater. It was founded in 2007 to develop HYBACS[®], a patented 'HYBrid ACtivated Sludge' process. Following rapid growth through licensing and acquisition, BwB's capabilities now include:

- HYBACS[®] (cost-effective activated sludge upgrade)
- FilterClear[™] (high throughput multi-media filtration)
- GHG-Tox (nitrification & greenhouse gas monitoring)
- NeoTech[™] (low energy, high reflectivity UV disinfection)
- World class R&D team, based at Cranfield University, UK

The company has a particular emphasis on reducing:

- CAPEX & OPEX
- Energy & chemical consumption
- Physical & environmental footprint
- GreenHouse Gas emissions – operational and embedded

Combining R&D expertise with a highly entrepreneurial business approach, BwB not only develops its own innovations but also scours adjacent markets for complementary IP, licence opportunities and partnerships. Through this aggregation strategy, BwB aims to be the natural choice for cost effective treatment, re-use and monitoring provision across the water, wastewater and process industries.

HYBACS® is rapidly gaining commercial traction among a growing number of companies in Europe, North America, South Africa, Asia and the Middle East, on the basis of its commercial superiority to comparable high performance treatment processes worldwide, across a wide range of treatment requirements. HYBACS® is an innovative nutrient removal wastewater treatment process that was developed from a process originating in South Korea. It is applicable to new as well as existing works, over a wide range of scales, and has been proven commercially in over 25 applications with recent contracts including: the 100,000m³/day upgrade of the largest wastewater treatment works in Bahrain; and Severn Trent Water's Ashbourne sewage treatment works in the UK, serving a population equivalent of 35,000.

HYBACS® is not only highly applicable to the municipal treatment sector but also to a wide range of high strength organic industrial wastewaters from food or beverage production, to leachate and livestock waste treatment. BwB aims to present customers with solutions which provide benefits in capital and lifetime cost, treatment performance, ease and speed of plant deployment, whilst being easily combined with tertiary filtration for high quality water reuse applications.

FilterClear™ is a pressure multimedia filter technology capable of separating suspended solids from a wide range of waters with a comparatively high performance, even at high loading velocities. FilterClear™ plants are currently installed at over 40 sites, treating waters such as secondary effluent at wastewater treatment plants, cooling waters at industrial sites and seawater at desalination plants. Throughput ranges from 10m³/hour up to 5,000 m³/hour.

FilterClear technology competes cost effectively with other multimedia filters, continuous filters, deep bed filters, disc filters and micro screens. It has a strong track record in conventional filtration applications and can replace ultrafiltration membranes upstream of RO membranes.

Current clients include Scottish Water, Northumbrian Water, Diageo, Saudi Aramco, Michelin, Museum of London and several resellers.