

Significant advancements in harmful algae bloom mitigation and water quality monitoring.

Expanding the toolbox of the water management professional while lowering the chemical footprint and mitigation expenses.

PINEY FLATS, TENNESSEE, UNITED STATES, August 18, 2022 /EINPresswire.com/ -- With recurring harmful algae blooms quickly becoming one of the environmentalists' greatest concerns, a think-outside-the-box approach is necessary to eliminate the widespread and often complete reliance on chemical mitigation techniques in algae control. These traditional applications, revolving around the introduction of copper sulfate (a poison) into the water supply, can severely damage the entire water biome if applied incorrectly and repeatedly. They also contribute to the recycling process of phosphates and



nitrates, the very thing that facilitates these blooms in the first place. With each chemical application, the subsequent bloom becomes larger until the issue is nearly untenable. These blooms cause irreversible damage and greatly contribute to our deteriorating environment as well as drastic downturns in the economies of those communities affected by them.

Hydro BioScience, LLC, have been leaders and pioneers in the exciting and novel application of ultrasound for algae and biofilm/biofouling control. For several years they have been assisting water management professionals choosing an effective and environmentally friendly approach to toxic algae bloom mitigation and prevention with their <u>ultrasonic algae control</u> systems.

In a recent application, HBS technology facilitated the end of a 44-year reliance on copper sulfate

for an <u>upstate New York watershed</u>, saving the management company and community, hundreds of thousands of dollars in chemical and manpower expenses while investing a mere \$6500 in this technology. Quite the return of investment.

At the heart of the HBS line are the well-known Quattro-DB[®] and Mezzo-DB[™] algae remediation systems based on proven, safe and EPA registered ultrasonic technology. These transducers, working in harmony with the surrounding environment, introduce a multitude of low amplitude, ultrasonic frequencies into the water that disable the ability of algae to engage in the life-necessary process of photosynthesis.

HBS has now announced significant advancements and additions to their 2022 line of products including those to their world-wide patented algae remediation systems. These systems currently have thousands of applications across the planet and empower the world with chemical free, environmentally friendly, and effective algae management applications, now at significantly reduced costs while expanding the scope and effectiveness of HBS technology.

These highly tested and effective systems now include the following improvements:

Transducers:

• New construction sonic heads with improved reliability and effective operation

The HBS SolaRaft-iQBD[™] with Water Quality monitoring and single Quattro-DB®



MyQuattro[™]: The free monitoring and scheduling application from HBS.

• Double the power

- Integration of additional bandwidths
- Available hardwired to cable or with a new, field installable, IP69X waterproof connector. Power supplies:
- Universal input 85-264 VAC for easy, international applications.
- Increased enclosure strength now meets IP67
- Readable LCD Screen
- Serial and cellular communications are available as options.
- Wireless communication is standard and allows for monitoring the device and scheduling on/off cycles through our free smartphone application: MyQuattro[™].

HBS algae and biofilm management systems are powered by either AC power (24 Vdc systems also available) OR by in house manufactured solar arrays. Improvements to solar arrays include:

• 50% reduction in solar panel size, reflecting the latest developments in solar panel technology

• Lightweight, high efficiency, high energy density, charge efficient battery packs. This contributes to a significant reduction in shipping weight and advanced battery charging and storage efficiency.

While building its reputation in ultrasonic applications for algae and biofilm management, HBS has recently entered the <u>water quality monitoring</u> market with the release of the SolaRaft-iQM[™]: The worlds most advanced, remote, solar powered, water quality monitoring system. This lightweight, high visibility system arrives virtually assembled requiring only a few minutes to ready for deployment. It is completely wireless with optional cellular and serial communications. Data is delivered straight to a computer or handheld device. This proprietary design is available in three colors: Yellow, Black, and (special order) Green.

Using the same ground up, proprietary engineering and technology featured in the SolaRaftiQM[™], HBS has replaced its previous and cumbersome pontoon system (requiring 4 or more people to navigate) with the new SolaRaft-iQDB[™]. This double-raft construction is capable of powering two algae management systems or a combination of water quality monitoring and a single Quattro-DB[®] or Mezzo-DB[™] system. This new design significantly reduces the weight and shipping cost while expanding functionality and features. It weighs a mere 120 lbs., is easily managed, and deployed by 1-2 people and it features all the latest advancements and options available on the SolaRaft-iQM[™].

By combining real-time, water quality monitoring and safe, chemical free algae control systems, HBS has increased the depth of the quality driven toolbox accessed by water maintenance professionals. HBS now provides the technology to quickly and accurately deliver necessary data needed in guiding water management strategies as well as provide proven and safe tools to manage algae, algae blooms, and biofouling. This unique combination will soon drive most algae bloom mitigation strategies across the globe and be the backbone of water management professional strategies. Hydro BioScience, LLC is a scientific research, engineering, and manufacturing company, located in Piney Flats TN. Pioneers in the application of ultrasound for algae and biofilm management and eradication, HBS also manufactures the worlds most advanced water quality monitoring systems. HBS currently works with many municipalities, businesses, and private individuals in aiding the implementation of applications targeting the lowering of their chemical footprint, cleaning their water sources, and ensuring safe environmental conditions where water is concerned.

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