



MODERNWATER

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**Modern Water plc**  
("Modern Water" or "the Group")

## **MODERN WATER'S TOXICITY MONITOR USED FOR RIVER CLEAN-UP RESEARCH**

Modern Water plc (AIM:MWG), the owner of leading water technologies for the production of fresh water and monitoring of water quality, has collaborated with the University of Central Florida (UCF) to supply a Microtox® M500 toxicity monitor. The monitor will assist with research into advanced treatment techniques which could provide a solution to the removal of Total Phosphorus from the Middle St. Johns river basin in Central Florida.

Recently the Middle St Johns river has been found to have excessive concentrations of total phosphorous and current studies have indicated that conventional stormwater treatment methods are insufficient to provide the necessary level of water quality. The reuse of byproduct materials, including fly ash, dried alum sludge (drinking water treatment residuals) and tyre crumb, which all have high phosphorous sorption capacities, were assessed as part of this study. The adsorbents are typically low value but some of them could be considered environmentally hazardous and may pose a potential environmental risk so it was necessary to monitor the toxicity of these materials during the research.

The UCF chose the Microtox M500 as it provides rapid toxicity testing with immediate results. This has allowed the university to make real-time adjustments in order to identify potential toxicity-related challenges.

Dr. Duranceau, P.E. Associate Professor and Director of the Environmental Systems Engineering Institute at the University of Central Florida, said: "We chose the Microtox® M500 for its ease of use and rapid toxicity testing. This is important as this enables the toxicity testing to happen concurrently with the rest of the research project."

Simon Humphrey, Modern Water CEO, added: "This study represents one of the first examples of using Microtox® as part of a nutrient treatment technological evaluation and this example demonstrates yet another application for our rapid toxicity monitor."

**Ends**

### **For further information**

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**Notes to editors**

Modern Water owns, installs and operates world-leading membrane technology and develops and supplies advanced systems for water monitoring. Its shares trade on the Alternative Investment Market of the London Stock Exchange.

Modern Water's patented forward osmosis (FO) technology's benefits include lower energy consumption and lessen environmental impact in a variety of industries. With a sales presence in almost 60 countries, the Group's Monitoring Division includes a leading real-time continuous toxicity monitor and trace metal analysers for monitoring the quality of drinking water.

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