IWA OPERATIONS CHALLENGE FOR WATER UTILITY OPERATORS

May 2024

Dear Utility

# Does your utility want to be part of the Operations Challenge at the IWA World Water Congress in Toronto Canada?

The International Water Association’s flagship event, the [IWA World Water Congress](https://worldwatercongress.org/), takes place on August 11-15, 2024, in Toronto, Ontario, Canada. The extensive programme will include an Operations Challenge to test the practical skills of utility teams. The local host for the challenge is the Water Environment Association of Ontario (WEAO).

The International Water Association is a global membership organization of water and sanitation professionals, with membership in more than 140 countries. At the Congress, IWA brings together thousands of participants to share insights and innovations and to progress equitable and sustainable water solutions for our world.

IWA’s Operations Challenge will bring teams together to compete across four events. Participation in 2022 included teams from the Nordic countries, other parts of Europe, and North America. This year we hope to further attract interested utilities from around the world which will reflect the global reach of IWA. The challenge will be held in the exhibition area at the Congress venue, the Metro Toronto Convention Centre, on August 14, 2024. Free entrance to the exhibition will ensure big interest.

We would like to extend an invitation to your water utility to take part in the Operations Challenge in Toronto. There is no charge to participate.

# Challenge Areas

The IWA Operations Challenge will be adapted from the model used at [WEFTEC](https://www.weftec.org/program/exhibition/operations-challenge/) and made possible through collaboration with WEAO, WEF, and many other generous sponsors.

Teams of four members will compete in four events: maintenance, laboratory, collections, and process events. A winner of each event and an overall winner will be awarded after the competition. Operations Challenge allows utilities to showcase the diverse skills and competencies of their operations and maintenance personnel used on a day-to-day basis.

**Maintenance**

This event will test the skills of a maintenance team in response to issues at a sanitary pumping station. Teams will remove a pump from a sanitary wet well and perform a full preventive service before returning it to service.

The maintenance event is sponsored by John Brooks Company Limited and Vaughan Chopper Pumps

**Collection Systems**

In this event, teams simulate connecting a 4-inch PVC lateral sewer to an 8-inch PVC sewer pipe; replacing a leaking section of existing 8-inch PVC sewer pipe while in service; and the construction of a Victaulic Pipe Tower.

**Laboratory**

In this event, competitors demonstrate their laboratory skills by conducting a series of TDS and TSS tests and analyses, ensuring the accurate monitoring and control of wastewater treatment processes.

**Process Simulator**

In this event, teams will demonstrate their wastewater process troubleshooting skills by making operational changes to a virtual treatment plant to bring the facility into compliance. Teams score points by adjusting plant operation such as chemical dosage rates, DO setpoints, and recycle pump rates to meet effluent quality targets. Teams are challenged to solve as many problems as possible (across two different facilities) in 15 minutes.

The simulator event is sponsored by Hatch, who provides the SimuWorks Process Event simulator platform.

Alongside these skills, teams are judged in a side competition on **Team spirit and collaboration**.

# How can I express interest?

Utilities interested in competing in the IWA Operations Challenge should send an email to [iwa@weao.org](mailto:iwa@weao.org)

There is no fee for participating in the challenge. The number of teams is limited, so please respond as soon as possible and **no later than the 15th of July.**

Further details about the competition, including detailed event procedures, and information about registration, will be provided at a later date.

If you have any questions, please contact Richard Szigeti through [iwa@weao.org](mailto:iwa@weao.org)

Kind regards,

Richard Szigeti, WEAO

IWA World Water Congress & Exhibition 2024 Operations Challenge