

Energizing the KSB Maintenance Event

Big changes to event reflect real-world problems and solutions

When entering the exhibition at WEFTEC® 2018, Operations Challenge spectators will see some big changes in the KSB Maintenance Event. Not only will a new pump make its debut, but also for the first time in the competition, the system will be pumping water.

“Spectators will find this new event very exciting and it will imitate actions that operators perform on a daily basis,” said Stephen Motley, KSB Maintenance Event coordinator.

The submersible pump, provided by KSB Inc. (Frankenthal, Germany), is equipped with an impeller that has been designed to help with ragging issues caused by wipes.

“Recently there has been a changing composition of the sanitary sewer flows that has caused complex problems worldwide. The composition of today’s sanitary sewer flows is different than that of previous years due to an ongoing trend,” Motley said. The trend has been an increased use and disposal of wipes down toilets that have led to “countless numbers of sanitary sewer overflows and additional maintenance and overtime by wastewater workers to keep our wastewater systems up-and-running,” he said.

The KSB F-Max pump consists of an asymmetrical blade arrangement that allows solids to pass through the pump and creates a swirling effect to shift wipes away from the impeller’s shaft. As the wipes move to the outside of the impeller, they can be pumped out, Motley said.

In the new event, teams will need to respond to a trouble alarm sent to the Operations Control Center by the pump. The team will need to

- troubleshoot the electrical control panel,
- perform routine maintenance on the submersible pump and wet well, and
- restore the pump station back to normal operating condition.

When the team finishes the event, if the steps have all been done correctly, the pump will begin moving water again. The event introduces the danger of an arc flash – a rapid release of electrical energy – within the electrical equipment.

“Pump ragging and arc flash have been recent hot topics within the industry and things that operators are routinely having to deal with,” Motley said. “This new event exposes them to those issues and how to deal with them.”

Operations Challenge teams have had the opportunity to try out the new event at local and regional competitions. “I have been extremely pleased with how the new event has gone,” Motley said.

“We felt it was important to simulate a real wastewater challenge,” said Sherry Heinely, KSB Inc. marketing manager for North America. The event was designed to represent a current problem for those in the water sector and follows the steps of a real-world solution from shutting down an operating pump to locking out the system to performing typical maintenance to putting the pump back into service, she said.

“The teams seem very excited about this new event,” Heinely said.

Teams that competed in the Operations Challenge event hosted by the Water Environment Association of Texas at Texas Water 2018 had the opportunity to try out the new KSB Maintenance Event. Empowering Pumps



The Franken Foggers team from the New England Water Environment Association competes in the new KSB Maintenance Event at the Battle of the Boardwalk in Atlantic City, N.J. The New Jersey Water Environment Association hosts this regional Operations Challenge competition. Stephen Motley



For the first time, the updated Operations Challenge KSB Maintenance Event will feature running water. Stephen Motley

