

WEFTEC® 2016 INGENUITY CONTEST WINNERS ANNOUNCED

This year marks the fifth year this competition has sought to recognize those fixes that began on the front lines with the need to tackle a persistent problem using just what's at hand and a big shot of ingenuity. The 2016 competition yielded six awards.

ICE BREAKER

James Spielvogel from the Borough of Ellwood City, Pa., Wastewater Treatment Plant received the Ice Breaker Award. He invented a device to safely and easily lift the clarifier skimmer in the winter to prevent the skimmer from freezing to the grease box. Using this invention, one operator can stand on a clarifier bridge with a hooking pole and lift the skimmer onto an arched hook.



LIFTING THE SKIMMER ARM UP USING THIS HOOK PREVENTS IT FROM FREEZING TO THE TROUGH. THIS INGENIOUS FIX MAKES THE MOST OF EASILY AVAILABLE AND SAFE TOOLS AND IS QUICK, SAFE, AND SIMPLE TO USE. James Spielvogel

TROUGH TOASTER

Aaron Dressel, Chris Wize, Kelly Wolfe, and Dan Danhauer from York, Neb., earned the Trough Toaster Award. Coincidentally, this team also found a fix to prevent freezing, but took a different approach. To prevent the scum trough on the thickener from freezing to the skimmer arm, the team installed a heat lamp above the trough. To protect the lamp from the elements, they designed and built a hood-type fixture and frame to hang the lamp over the trough. The result: not one frozen trough all of last winter.

DANGER DODGER

Cheryl Read from the King County (Wash.) Wastewater Treatment Division earned the Danger Dodger Award for repositioning valve handles to avoid the need for confined space entry.

Valve actuators in the secondary sediment tanks at King County's South Plant required confined space entry to reach. But Read realized that by rotating the valves 90 degrees, the handles could be reached from the outside.

Industrial maintenance mechanics Marvin Romack and Dalen McMichael repositioned the valves to eliminate the need for a confined space entry and make working on the valves safer and easier.

DIGITAL TRAILBLAZER

Brandon Pfleckl, Yeonny Venetsanos, Annie Short, Ben Slater, Ani Guha, Maureen Knight, Irma Houck, Terry Dye Jr., Karen Hogan, Andrew Cockram, and Tracey Beaver from the Prince William County (Va.) Service Authority drew the Digital Trailblazer Award for building their own map-based applications to display information for operators in the field. The team overlaid existing information into a geographic information system so that all asset and status information could be visualized and analyzed in a map-based context. The system collects maintenance, customer, financial, and design information into a single, mobile interface.

BEAKER PEEKER

Gregory Williams from Good Harbour Laboratories (Mississauga, Ontario, Canada) received the Beaker Peeker Award for the vision to use the graduations on a simple glass beaker to measure scum depth from the top of an open tank. He simply dons gloves and lowers a large beaker – the 2-L size works well – down into the scum. The markings on the beaker can be recorded and the distance between them measured later to give a relatively accurate thickness.

EXPLAINER IN CHIEF

Walton J. Summers II from the Jacksonville (Ark.) Wastewater Utility earned the Explainer in Chief Award for educating the public. This award recognizes both a Christmas parade float that shows the wastewater treatment process and a tabletop display that shows the consequences of misusing sewers as trashcans.



THE FLOAT INCLUDES AN "ELF OUTHOUSE," A LARGE PIPE WRAPPED IN MULTICOLORED MOTION LIGHTS TO SHOW FLOW, AND A MINIATURE COPY OF THE TREATMENT FACILITY THAT INCLUDES SCREW PUMPS AND CLARIFIERS. THE COLORED LIGHTS CHANGE TO WHITE AND LIGHT BLUE AS THEY EXIT AND LEAD INTO A STREAM WITH FISH SWIMMING, DEER DRINKING, AND A GIANT SNOWMAN FISHING. Walton J. Summers II