LAB EVENT

This is a new event for Ontario and will run from Spring 2019 to Spring 2022.

In the lab event, operators are required to perform testing on wastewater samples and to use the results to calculate required operational process needs. Teams work together, using established laboratory methods and instrumentation to measure parameters critical to the wastewater process.

This year, participating teams will be required to analyze samples representing a normal treatment process including influent, effluent and intermediate process samples for TSS (total suspended solids; gravimetric method) and TDS (total dissolved solids) after calibration of YSI Xylem MultiLab Meter based on conductivity. They will also be required to calculate a mass balance across the treatment system to evaluate the removal efficiency of various treatment trains.

Teams compete to finish the challenge as quickly as possible while ensuring that all method steps are completed accurately in accordance with the written method. Time penalties are incurred for infractions such as missed method steps, poor lab practices and not following safety procedures.

There are a number of judges, each of whom is assigned a list of different infractions to watch for. Time stops when the team has cleaned the laboratory work area, handed in their worksheets and stepped out of the competition area.

All teams have their own strategy for competing in the lab event. To be successful, it is necessary for each team member to be well versed in the specific tasks that they will be performing and have the procedures memorized. The most important key to obtaining a good score is practicing and working together as a team.

For more information on the Lab Event and all associated rules, please contact Krista Thomas at kthomas@peterborough.ca