

Waters Microbiological

Aim of the Program

This proficiency testing program aims to assess laboratories' capability in the identification and enumeration of a mixture of organisms from water samples; and to provide participants with external quality assurance to enhance accuracy and reliability.

Application of the Program to Accreditation

Participation in this proficiency testing program satisfies the requirements of ISO/IEC 17025:2017 – *General Requirements for the Competence of Testing and Calibration Laboratories* for monitoring performance by comparing results with other laboratories.

Program Details

The Waters Microbiological program is a bi-annual program comprising of two rounds per year. The rounds are usually scheduled for March and September.

Participants receive two freeze dried water samples which are re-hydrated to represent either sewage effluent or drinking (potable) water supply reservoir samples. The samples are to be tested for *E.coli*, Faecal Coliforms, Total Coliforms, Faecal Enterococci and 37^o C (or 35^oC) Plate Count, extra tests for potable waters only include *Pseudomonas aeruginosa* and *Clostridium perfringes*. Participants are asked to analyse the sample by MF technique, MPN (traditional and Plate count) using the laboratory's routine method.

Participants are requested to report and estimate of their measurement uncertainty (MU). Laboratories results are assessed for the number of outlier results that are reported and identification outliers for false positives and false negatives reported. Statistical outliers are identified using a robust z-score technique to detect excessively large variations between the individual laboratory and the consensus.

Reporting:

At the conclusion of each round, each participant receives a confidential individual summary sheet, detailing its performance in the program, and a final program report summarising all participant data.

Confidentiality

Each participant is assigned a unique code number, keeping all results anonymous in all PTA reports and publications.

Fees and Further Information

For information on program fees or other enquiries, please contact PTA directly:

Email: ptaenquiry@pta.asn.au