

Air and Emissions

Aim of the Program

The Air and Emissions Proficiency Testing Program is designed to assess each participant's ability to accurately test the chemical properties of air and emissions.

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 Air and Emissions program is a biannual program, i.e. consisting of two rounds per year usually scheduled during May and November.

For rounds scheduled during May participants receive one or more filter paper or impinger solution samples, alternating between a range of tests including:

Hydrogen Halides and Halogens, Fluoride, Nitrogen Oxide, Sulphur Dioxide, Sulphuric Acid and Sulphur Dioxide, Ammonia and Metals on Filter Paper.

Occasionally for the round scheduled in May, rather than receiving a sample to test, participants will receive a Table of field data to be entered into laboratory spreadsheets, including velocity pressures, temperatures, static pressure, stack dimensions, pitot tube coefficient, barometric pressure, moisture volume and gas composition. Laboratories are to use the provided data to calculate average stack gas velocity and stack gas volumetric flowrate at actual conditions and on a dry basis at 0°C and 101.3 kPa, using the outputs from their spreadsheets.

Rounds scheduled in November are dedicated to Particulate Matter on Filter Paper only. Participants will receive one filter paper sample to test for particulate matter.

Participants are requested to analyse the samples, provide an estimate of their measurement uncertainty and to indicate the methods they used. The results submitted by participants for a particular test are typically pooled across all methods and robust z-scores are used to analyse the results.

Summary sheets detailing the performance of that laboratory in the program are submitted to individual participants once results have been analysed. A final report, summarising the information submitted by all of the participants will be emailed to participants at the conclusion of each round of the program.

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