



## MODULE 6A

### PROFICIENCY TESTING (PT) AND ROUND ROBIN PROGRAMS

#### 6A.1 PARTICIPATION

The laboratory shall participate in AIHA Proficiency Analytical Testing (AIHA PAT) Programs, as specified in Modules 6B-6F and Appendices A-F, or an equivalent proficiency testing program approved by AIHA-LAP, LLC for all Fields of Testing (FoT)/Methods defining its scope of accreditation. Samples shall be analyzed using the same analytical procedure used to test customer samples

#### 6A.2 PROGRAMS OFFERED BY AIHA PAT PROGRAMS, LLC

AIHA PAT Programs, LLC offers programs that support AIHA laboratory accreditation and include the following programs: IHPAT, ELPAT, EMPAT, BAPAT, and BePAT. Laboratories seeking accreditation for a FoT/Method(s), where there is a program offered by AIHA PAT Programs LLC, or an equivalent proficiency testing program approved by AIHA-LAP, LLC, must participate in the specified program to obtain accreditation for the applicable FoT/Method(s). Samples from AIHA PAT Programs, LLC are also available for purchase to those laboratories that do not intend to seek laboratory accreditation.

##### 6A.2.1 Enrollment and Fees

A laboratory wishing to participate in any of the programs offered by AIHA PAT Programs, LLC shall complete the *PAT Enrollment Form* and the *PAT Participation Agreement* and submit them to AIHA PAT Programs, LLC with the appropriate fees. All *PAT schedules*, fees and forms are available on the AIHA PAT Programs, LLC web site at [www.aihapat.org](http://www.aihapat.org)

##### 6A.2.2 PT Data Reports

The AIHA PAT Programs, LLC provides reports to each participating laboratory within thirty (30) business days after the close of the proficiency testing round. Accredited laboratories (or those seeking accreditation) shall maintain these records for use during the assessment process.

##### 6A.2.3 Proficiency Status

Laboratories seeking accreditation for a FoT/Method(s) where there is a program available from AIHA PAT Programs, LLC or an equivalent proficiency testing program approved by AIHA-LAP, LLC must be proficient in the specified program to obtain accreditation for the applicable FoT/Method(s). Laboratories are rated for proficiency based on the number of outliers in each testing round. Each individual program describes the criteria for proficiency in Modules 6B-6F. Accredited laboratories shall maintain proficiency for all applicable FoT/Method(s), as defined in Module 3, Section 3.8.2.

Any non-participation or non-reporting of proficiency testing data shall be considered an outlier unless the laboratory has obtained pre-approval for non-participation from AIHA-LAP, LLC. An outlier is defined as a result outside of the established statistical control limits.

##### 6A.2.4 Practice Rounds

A laboratory wishing to develop new analytical capabilities may purchase samples from AIHA PAT Programs, LLC from previous rounds for practice, if available. These data shall not be used to document proficiency for the purpose of accreditation. Practice rounds may also be used to



document laboratory quality control, with respect to new analyst training, and method validation procedures.

#### **6A.2.5 Addition of a Field of Testing**

Refer to Module 3, Section 3.9.

#### **6A.2.6 Additional Information**

For more information on Sample Distribution, Sample Receipt, Sample Analysis, Submission of Data and Reports, refer to AIHA PAT Programs, LLC's website: [www.aihapat.org](http://www.aihapat.org)

### **6A.3 OTHER APPROVED PROFICIENCY TESTING PROGRAMS AND ROUND ROBINS**

AIHA-LAP, LLC reviews and formally approves other proficiency testing and round robin programs for its accreditation programs and accepts data from these "approved" programs for certain FoT's. Examples of such programs are listed on AIHA-LAP, LLC's website: [www.aihaaccreditedlabs.org](http://www.aihaaccreditedlabs.org)

AIHA-LAP, LLC reserves the right to review and approve other proficiency testing programs and their subcontractors for conformity to ILAC Guide 13.

#### **6A.3.1 Other Approved Proficiency Testing Programs.**

In approving other proficiency testing and round robin programs, AIHA-LAP, LLC will look for the following features:

**6A.3.1.1** Proficiency samples and background matrices shall resemble real-world samples to the degree possible.

**6A.3.1.2** Target concentrations of the proficiency testing samples must be appropriate for the program in which they are being applied. For example, if the samples submitted to the laboratory are for occupational hygiene purposes, the target concentrations must be relevant to evaluation of an occupational exposure guideline.

**6A.3.1.3** The units of results for reported data shall be appropriate for the type of testing performed. Reported results shall be in units appropriate to the end use of the data, such as for comparison to target standards.

**6A.3.1.4** All proficiency testing programs shall conclude with a proficient or non-proficient rating based on a common statistic or other procedure acceptable to the AIHA-LAP, LLC.

**6A.3.1.5** Samples taken from reference atmospheres (laboratory or field) are preferable to samples spiked using solutions or slurries.

**6A.3.1.6** Samples shall be in, or on collection media, similar to media used in the field, to the degree possible.

**6A.3.1.7** All proficiency testing programs shall have at least two (2) rounds per year or as specified by the appropriate accreditation module.

#### **6A.3.2 Requirements for Round Robin Programs**



The following are requirements for round-robin programs.

**6A.3.2.1** Round robin samples must consist of or resemble real-world samples to the degree possible.

**6A.3.2.2** Round robin shall include participation of at least three (3) laboratories.

**6A.3.2.3** All round robin programs must have at least two (2) rounds per year, with each round completed within a six-month timeframe.

**6A.3.2.4** Each round shall include a minimum of four samples at varying concentrations. Target concentrations of the round robin samples must be appropriate for the program in which they are being applied.

**6A.3.2.5** When analysis includes subjective analyst evaluation (e.g., microscopic identification and/or quantitation) each laboratory shall have all analysts assess each round robin sample independently and report all individual analysts' results.

**6A.3.2.6** The units of results for reported data shall be appropriate for the type of testing performed. Reported results shall be in units appropriate to the end use of the data, such as for comparison to target standards.

**6A.3.2.7** A designated laboratory shall be responsible for data collection and distribution.

**6A.3.2.8** Resulting data shall be evaluated using appropriate statistical methods.

**6A.3.2.9** The laboratories shall attempt to resolve any significant differences in results among laboratories.

### **6A.3.3 Enrollment and Fees**

Laboratories participating in AIHA PAT Programs, LLC and other approved proficiency testing and round robin programs shall interface directly with the program administrators when enrolling in the program and when paying the required fees.

### **6A.3.4 Sample Analysis**

Like programs offered by AIHA PAT Programs, LLC, samples from other approved proficiency testing and round robin programs shall be analyzed, as specified by the program administrator, using the same analytical procedure used to test customer samples. Results or analysis of proficiency testing samples shall not be discussed with other laboratories until the results have been published by the program administrator.

### **6A.3.5 Documentation of Program Participation**

All documentation between the participating laboratory and the program administrator shall be retained by the laboratory for three (3) years and shall be made available to AIHA-LAP, LLC or its agents (e.g., AAB, TAP, Site Assessors) upon request. For the proficiency testing programs that have been formally approved by AIHA-LAP, LLC, the laboratory shall provide a report of proficiency sample results in accordance with the program protocols and/or as required in Modules 6B-6F.



#### **6A.4 Reporting of Proficiency Testing Results**

AIHA-LAP, LLC receives regular reports on the status of the participating laboratories' proficiency testing from AIHA PAT Programs, LLC and most other proficiency testing providers.