



## **MODULE 2G**

### **BERYLLIUM FIELD/MOBILE ACCREDITATION PROGRAM (Be FIELD/MOBILE)**

#### **ADDITIONAL REQUIREMENTS**

#### **2G.1 SCOPE**

The AIHA Laboratory Accreditation Programs, LLC's (AIHA LAP) Beryllium Field/Mobile Accreditation Program (Be Field/Mobile) is intended for accreditation of field/mobile analytical facilities. Accreditation in this program is based upon a review of the laboratory management systems as defined in Module 2A, this program specific module, and successful participation in appropriate Proficiency Testing as defined in Module 6.

#### **2G.2 DATA INTEGRITY REQUIREMENTS**

- 2G.2.1** Procedures shall be in place to maintain the integrity of the data. At a minimum these procedures shall include:
- a. signed record for each employee that demonstrates that they understand their responsibilities for the integrity of the data they generate.
  - b. data integrity training for all employees with annual refresher training.
  - c. all data integrity measures must have prior approval from senior laboratory management.
  - d. annual auditing of data integrity.

#### **2G.3 ANALYTICAL METHODS**

A documented process for defining, establishing, verifying, and reporting of minimum reporting limits shall be established and implemented. The following specific requirements for method reporting limits and instrument calibration apply to analytical procedures for field/mobile testing of Be.

- 2G.3.1** Minimum reporting limits shall be established initially by analyzing media spiked samples, prepared at the desired minimum reporting limit concentrations, and taken through the entire analytical process. Acceptance criteria shall be documented.
- 2G.3.2** During the analysis of samples, instrument performance at the minimum reporting limit concentration shall be verified with each analytical batch through the analysis of an analytical standard prepared at or below the analyte's minimum reporting limit concentration. Acceptance criteria shall be documented.
- 2G.3.3** At least annually or when there is a change in methodology or instrumentation, minimum reporting limits shall be re-established by a process that requires



analysis of a media spiked sample prepared at or below the minimum reporting limit concentration and taken through the entire analytical process. Acceptance criteria shall be documented.

- 2G.3.4** For field/mobile testing of Be, a calibration curve shall be constructed with a minimum of three (3) calibration standards, which bracket the expected sample concentrations. For those technologies and software packages requiring fewer calibration standards, follow the manufacturer's recommendations (e. g., the instrument operations manual). The calibration curve shall be verified by preparing an independently prepared calibration standard (from neat materials) or with a standard from an independent source. Acceptance criteria for the standard calibration curve and the independent calibration verification standard shall be documented.
- 2G.3.5** Instrument standardization (calibration) shall be verified, at minimum, each 24-hour period of use, or at each instrument start-up by analysis of a continuing calibration verification standard. Acceptance criteria shall be documented.
- 2G.3.6** Calibration or working quantification ranges shall encompass the concentrations reported by the laboratory. Continuing calibration verification standards and continuing calibration blanks shall be analyzed in accordance with the specified test methods. Acceptance criteria shall be documented.
- 2G.3.7** Media-based laboratory control spikes (LCS) shall be prepared and analyzed concurrently with each batch of samples. The spike level shall be at a concentration to fall within the calibration curve. Acceptance criteria shall be documented for LCS recoveries.

Precision shall be monitored by the analysis of duplicate portions of client samples where subsampling is performed and where positive test results are expected. Where whole sample analysis is performed and/or where positive test results for client samples are not expected, precision shall be monitored by either the analysis of within-batch laboratory control spike duplicates (LCSD) or by using between-run LCS or reference materials. Acceptance criteria shall be documented for precision.

- 2G.3.8.** The Be field/mobile analytical facility shall have documented procedures that address calibration or standardization measures when field/mobile equipment is left unattended. The procedures shall state the amount of time the equipment can be left unattended without identifying and characterizing drift from the last standardization performed.



**2G.3.9** Drift from the instrument standardization shall not be used to adjust data.

**2G.3.10** The location of the Be field/mobile analytical facility at the time of the analysis shall be documented.