

## Training – 5.2

- **4L.1.1** Document the competence of all who operate specific equipment, perform tests, evaluate results, and sign test reports.
- The competence determination shall be based on appropriate education, training, experience and / or demonstrated skills.

1

**4L.1.1** The technical manager shall ensure and document the competence of all who operate specific equipment, perform tests, evaluate results, and sign test reports. The competence determination shall be based on appropriate education, training, experience and / or demonstrated skills.

## Training – 5.2

- **5L.2** Training records shall include a
  - description of training program contents, the duration of the training,
  - qualifications of the trainer, and
  - evidence of their competence such as described in 5.2.1.1 of the LQSR rv 3.

2

**5L.2** Training records shall include a description of training program contents, the duration of the training, qualifications of the trainer, and evidence that the analyst/technician has successfully demonstrated their competence such as described in 5.2.1.1 of the LQSR rv 3.

## Training - 5.2

- **5L.2.1.1.2** training program content,
- Duration of the training,
- Qualifications of the trainer, and the objective evidence of successful training,
  - known reference samples of the matrices of concern within the specified acceptance criteria must be maintained by the laboratory.

3

## Training – 5.2 No Change

- **5L.2.1.1.3** The analyst shall complete a minimum of four independent test runs of sample preparation (when applicable) and/or instrumental analysis for each matrix.
  - An independent run  $\geq$  five samples of known lead content,
  - one CRM or PT and
  - separated by a period of time sufficient to evaluate the performance of any previous independent run.

4

**5L.2.1.1.2** A description of the training program content, the duration of the training, qualifications of the trainer, and the objective evidence that the analyst / technician has successfully selected and/or collected the samples and prepared and tested, as appropriate, known reference samples of the matrices of concern within the specified acceptance criteria must be maintained by the laboratory.

**5L.2.1.1.3** The analyst and/or technician trainee shall complete a minimum of four independent test runs of sample preparation (when applicable) and/or instrumental analysis for each matrix. An independent run is defined as analysis of at least five samples of known lead content, one of which is a certified reference material or proficiency testing material and is separated by a period of time sufficient to evaluate the performance of any previous independent run.

## Training – 5.2 No Change

- **5L.2.1.1.3**
- For sample preparation and analysis training, the recoveries of the associated RM or PT samples for each run must be within the requirements of Table 3.
- For some analytical testing technologies it may not be possible to separate the sample preparation techniques from instrumental analyses. In such cases, the training requirements shall be based upon the minimum requirements stated for both analysts and technicians.

5

## Training – 5.2 No Change

- **5L.2.1.1.4** Analyst/technicians shall demonstrate their ability to proficiently test samples for lead at least every six months.

6

### **5L.2.1.1.3**

For sample preparation training, the recoveries of the associated reference materials or proficiency training samples for each run must be within the requirements of Table 3.

For instrumental analysis training, the recoveries of the associated reference materials or proficiency training samples for each run must be within either Table 3 or 4 as applicable.

For some analytical testing technologies it may not be possible to separate the sample preparation techniques from instrumental analyses. In such cases, the training requirements shall be based upon the minimum requirements stated for both analysts and technicians.

## Training – 5.2 No Change

- **5L.2.1.2.1** All mobile laboratory and FSMO personnel involved in sampling shall also be certified by EPA pursuant to Section 402 of the Toxic Substance Control Act (TSCA) and its implementing regulations.

7

## Training – 5.2 No Change

- **5L.2.1.2.2** All mobile or FSMO technicians shall be evaluated by a competent supervisor for their first two NLLAP-related job sites.

8

**5L.2.1.2.1** All mobile laboratory and FSMO personnel involved in the selection of samples or sampling areas as a part of a lead-based paint risk assessment and/or clearance testing in target housing and/or child occupied facilities shall also be certified by EPA or an authorized state or tribal program as a risk assessor/inspector/sampling technician as pursuant to Section 402 of the Toxic Substance Control Act (TSCA) and its implementing regulations.

## Accommodation 5.3

- **5L3.1** For laboratories operating portable testing technologies, sample collection and field testing shall be conducted so as to minimize the chance of cross-contamination.
- Site access shall be controlled to the extent possible while sampling and testing are taking place.

9

## 5L3.1 Contamination Control

- **5.3.1.1 Laboratory Dust Wipe Checks**
- For fixed-site and mobile laboratory facilities, conduct wipe sampling at least quarterly
- Contamination is below the specified maximum allowable concentration of 50 % (20 ug/sq ft) of the lowest regulatory limit for dust wipe samples.
- For FSMO, appropriate contamination control blank samples shall be run.

10

### 5.3.1.1 Laboratory Dust Wipe Checks

For fixed-site and mobile laboratory facilities, contamination control by wipe sampling of sample preparation and testing area surfaces shall be conducted at least quarterly to determine surface concentration levels of lead.

Sample preparation and analysis is not to proceed until surface contamination is below the specified maximum allowable concentration of 50 percent of the lowest regulatory limit for dust wipe samples.

For FSMO, appropriate contamination control blank samples shall be run in order to monitor potential lead contamination as outlined in the QMSM.

## Accommodation –No change

- **5L.3.1.2 Lab ware Cleaning**

- Require a written SOP.
- specified frequency for monitoring cleaning baths,
- the monitoring of glassware contamination, and
- periodic monitoring of disposable lab ware
- glassware used for the method blanks should be processed through acid baths used by the laboratory.

11

### **5L.3.1.2 Lab ware Cleaning**

Cleaning procedures for lab ware shall be specified by the laboratory in a written SOP. The procedure shall include, where applicable, a specified frequency for monitoring of lead concentrations in cleaning baths, the monitoring of glassware contamination during the analysis of reagent or other blanks, and periodic monitoring of disposable lab ware contamination by analyzing of reagent or other blanks.

To assess possible contamination, glassware used for the method blanks should be processed through acid baths used by the laboratory for lab ware cleaning.