

Arizona's Regulations Concerning Instrument Calibration



A.A.C. R9-14-615.B

“A licensee or applicant shall have, implement, and comply with a written quality assurance plan that contains the following and is available at the laboratory for Department review: ...

8. A procedure for the analytical instrument calibration, including frequency of calibration and complying with the requirements for calibration in subsection (C);”



A.A.C. R9-14-615.B

“A licensee or applicant shall have, implement, and comply with a written quality assurance plan that contains the following and is available at the laboratory for Department review: ...

8. **A procedure for the analytical instrument calibration, including frequency of calibration and complying with the requirements for calibration in subsection (C);”**



A.A.C. R9-14-615.C

“A licensee or applicant shall: ...

3. Maintain and require each analyst to comply with a complete and current standard operating procedure for each licensed method, which shall include at least: ...



A.A.C. R9-14-615.C

- c. A list of the concentrations for calibration standards...
- e. A requirement for frequency of calibration;
- f. Calculation for the quantitation of the final concentration of samples, with the actual sample dilution factors and the calibration algorithm used...”



A.A.C. R9-14-615.C

- c. A list of the concentrations for calibration standards...
- e. **A requirement for frequency of calibration;**
- f. Calculation for the quantitation of the final concentration of samples, with the actual sample dilution factors and the calibration algorithm used...”



A.A.C. R9-14-615.C

- c. A list of the concentrations for calibration standards...
- e. A requirement for frequency of calibration;
- f. **Calculation for the quantitation of the final concentration of samples, with the actual sample dilution factors and the calibration algorithm used..."**



A.A.C. R9-14-615.C - Continued

“A licensee or applicant shall: ...

4. Calibrate each instrument as required by each approved method for which the equipment is used, as follows:



- a. If a calibration model is specified in the method, using the specified calibration model or, if another calibration model has been approved by ADHS as a method alteration, using the calibration model approved as a method alteration;
- b. If multiple calibration models are included as options in the method, using one of the included calibration models or, if another calibration model has been approved by ADHS as a method alteration, using the calibration model approved as a method alteration; or
- c. If the method does not include a calibration model, using the manufacturer's specifications for calibration;



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- b. If multiple calibration models are included as options in the method, using one of the included calibration models or, if another calibration model has been approved by ADHS as a method alteration, using the calibration model approved as a method alteration; or**
- c. If the method does not include a calibration model, using the manufacturer's specifications for calibration;



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- b. If multiple calibration models are included as options in the method, using one of the included calibration models or, if another calibration model has been approved by ADHS as a method alteration, using the calibration model approved as a method alteration; or
- c. If the method does not include a calibration model, using the manufacturer's specifications for calibration;**



A.A.C. R9-14-615.C - Continued

“A licensee or applicant shall: ...

5. Maintain calibration documentation, including documentation that demonstrates the calculations performed using each calibration model;



A.A.C. R9-14-616

“A licensee shall ensure that: ...

5. The following information is maintained for all supervisory, quality assurance, and analytical personnel: ...

- g. Documentation of each analyst’s completion of training related to instrument calibration that includes:
 - i. Instruction on each calibration model that the analyst will use or for which the analyst will review data;”



A.A.C. R9-14-616 - Continued

- ii. For each calibration model described in subsection (5)(g)(1), the specific aspects of the calibration model that might compromise the data quality, such as detector saturation, lack of detector sensitivity, the calibration model's not accurately reflecting the calibration points, inappropriate extension of the calibration range, weighting factors, and dropping of mid-level calibration points without justification; and
- iii. Instruction that a calibration model shall not be used or changed to avoid necessary instrument maintenance;"



A.A.C. R9-14-616 - Continued

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- iii. **Instruction that a calibration model shall not be used or changed to avoid necessary instrument maintenance;"**

