

CALIFORNIA COUNCIL OF TESTING & INSPECTION AGENCIES

FAQ^{10.046}

STANDARDIZATION RECORDS

Q Recently, we were in the process of installing a new temperature recorder for our curing room. During this period we experienced a CCRL inspection. They correctly noted a footnote of deficiency. “The accuracy of the temperature recorder for the moist storage facilities was not verified at six month intervals as required by Section 5.2.1 of C511. Subsequently AMRL is requesting our *current standardization records*. Could you enlighten us to what is meant by this terminology (verify standardization)?

Response Submitted by Pete Holter

A The standardization record for the recorder is a record that details the comparison made between the recorder and a reference thermometer as described in C-511, and adjusting the recorder if it is outside the allowable tolerance. There are six items of information you’ll want to include on the record:

1. Unique identification of the recorder.
2. Unique identification of the reference thermometer.
3. Name of the person who performed the standardization.
4. Reference to the procedure used, for example, “Procedure used: C511.”
5. Date the standardization was performed.
6. Detailed results including the temperatures indicated by both thermometers, and indication of adjustments made and new temperature readings if necessary.

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Response Submitted by Terry Eglund

According to Section 5.2.1.3 of ASTM C511-06 the laboratory is to verify the accuracy of the temperature recorder with that of the reference temperature-measuring device and adjust the

temperature recorder if the difference is greater than 1° C. This process is considered ***Standardization***, which is a simplified form of calibration. The process determines the correction to be applied to the result of a measuring device when compared to a reference standard. Standardization does not address all of the elements of uncertainty and does not lead to traceable measurements.

According to ASSHTO PP57-06 this process is termed ***verification of standardization*** a process that establishes whether the results of a previously standardized measurement device are in control.

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Got a question?

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