



# **US Environmental Protection Agency Office of Pesticide Programs**

**Office of Pesticide Programs  
Microbiology Laboratory  
Environmental Science Center, Ft. Meade, MD**

**Calibration and Maintenance of Timers**

**SOP Number: EQ-05-09**

**Date Revised: 07-18-22**

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Title	Calibration and Maintenance of Timers
Revisions Made	<ul style="list-style-type: none"><li>• Minor editorial changes for clarification purposes.</li></ul>

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Scope	Describes the process for calibration and maintenance of timers, certified instruments that can display time in seconds.
Application	Timers are used for managing timed activities in test methods.

	Approval	Date
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<b>1. Definitions</b>	<ol style="list-style-type: none"> <li>1. A2LA = American Association for Laboratory Accreditation</li> <li>2. ISO = International Organization for Standardization</li> <li>3. NVLAP = National Voluntary Laboratory Accreditation Program</li> </ol>
<b>2. Health and Safety</b>	None
<b>3. Personnel Qualifications and Training</b>	Refer to SOP ADM-04, OPP Microbiology Laboratory Training.
<b>4. Instrument Calibration</b>	Not applicable
<b>5. Sample Handling and Storage</b>	Not applicable
<b>6. Quality Control</b>	For quality control purposes, document the required information on the appropriate form(s) (see section 14).
<b>7. Interferences</b>	None
<b>8. Non-conforming Data</b>	<ol style="list-style-type: none"> <li>1. Procedures to handle non-conformances are consistent with SOP ADM-07, Non-Conformance Reports.</li> </ol>
<b>9. Data Management</b>	<ol style="list-style-type: none"> <li>1. Archive data consistent with SOP ADM-03, Records and Archives.</li> </ol>
<b>10. Cautions</b>	Not applicable
<b>11. Special Apparatus and Materials</b>	<p>Timer Specifications:</p> <ul style="list-style-type: none"> <li>• Battery operated bench top timers</li> <li>• Reads in hours, minutes, and seconds</li> <li>• Individual serial numbers</li> <li>• Calibrated per ISO 17025</li> </ul>
<b>12. Procedure and Analysis</b>	Calibration certificates must contain the stamp of the accrediting body (e.g., A2LA, NVLAP) and the calibration vendor certificate number.
12.1 Use Period of Timers	<ol style="list-style-type: none"> <li>a. Purchase new timers with accredited calibration certificates.</li> <li>b. Maintain an electronic inventory of timers with their calibration certification (Timer Certification Record; see section 14). Enter the timer serial number and calibration expiration date into the electronic</li> </ol>

	<p>inventory. After each addition, file a hard copy of the inventory and calibration certificate in the Timer Calibration Record notebook.</p> <p>c. When the calibration expires, remove the timer from service and the inventory.</p>
12.2 Operation	Follow the instructions, provided by the manufacturer, for the operation of each timer. See section 15.
<b>13. Data Analysis/ Calculations</b>	None
<b>14. Forms and Data Sheets</b>	Form is stored separately from the SOP under the following file name: Timer Certification Record EQ-05-09_F1.docx
<b>15. References</b>	Operation manuals for timers located in file cabinet in D-wing.