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## **Using NIST Handbook 44**

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NIST Handbook 44 is designed for use as a working tool by the weights and measures official, equipment manufacturer, installer, and service person; therefore, it should be readily available for all who use it. The official should be familiar with how to reference device requirements on a daily basis, but the user is not expected to commit Handbook 44 to memory. Direct and frequent reference to the requirements is the only way to be sure that requirements are applied correctly. Handbook 44 includes test requirements meant to be applied under laboratory conditions that would not be practical in a field setting.

## Handbook 44 contains:

Change Tables	Lists of amendments and editorial changes made to that edition of Handbook 44
Introduction	Basic information about the development and use of Handbook 44
Section 1	General Code requirements for all device types
Sections 2 - 5	Code requirements for specific device types such as scales, liquefied petroleum gas liquid-measuring devices, taximeters, etc.
Appendix A	Fundamental considerations includes information that promotes uniform enforcement of Handbook 44 codes
Appendix B	Historical information on the origins and development of units and systems of measurement
Appendix C	General tables of units of measurement for easy reference
Appendix D	Definitions for special terms used in Handbook 44

Each paragraph in Sections 1-5 has a letter-number designation for easy reference and finding groupings of related requirements. The paragraph-letter designations are as follows:

- G General Code These paragraphs apply to all devices unless there is conflict between a particular General Code and specific device code requirement, in this case the specific device code supercedes the General Code requirement.
- A Application These paragraphs pertain to the application of the requirements of a code to specific types of devices and those devices to which the code does not apply.
- S Specification These paragraphs relate to the design of equipment. These paragraphs contain information that is directed particularly to the manufacturers of devices.
- N Note apply to the official testing of devices.

- Tolerance indicate performance requirements. These paragraphs fix the limit of allowable error or departure from true performance or value.
- UR User Requirement are directed particularly to the device owner or operator and apply to the selection, installation, use, and maintenance of devices.

Requirements are classified with a status of either "retroactive" or "nonretroactive." Retroactive requirements are enforceable with respect to all equipment. Nonretroactive requirements are those that are only enforceable on equipment that is manufactured or placed in commercial service after a specified effective date. Typically, a requirement is designated as nonretroactive to allow time for manufacturers to make changes to their production processes and to avoid creating unnecessary hardship to the device owner.

In order to effectively enforce the requirements in NIST Handbook 44, field officials should be familiar with all paragraphs in Handbook 44, including those directed primarily to the manufacturer or device owner or user. Because Handbook 44 is continually updated to address the latest advances in technology and trends in marketplace practice, the inspector must routinely track changes to Handbook 44 requirements to be sure he or she is applying the Handbook correctly.