



Standard Guide for Management Systems in Laboratories Engaged in Analysis of Water¹

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1. Scope

1.1 This guide provides information on consensus good laboratory practices for laboratories that provide services in the sampling and analysis of water. As consensus standards, these are the minimum criteria that all laboratories should consider in establishing their good laboratory practices. This guide may not be applicable to certain types of laboratories (e.g., microbiological).

1.2 This guide is designed to be used by those responsible for the selection, operation, or control of laboratory organizations engaged in sampling and analysis of water.

1.3 This guide presents features of organization, facilities, resources, and operations which affect the usefulness of the data generated.

1.4 This guide presents criteria for selection and control of the features described in 1.3 and also makes recommendations for the correction of unacceptable performance.

1.5 This guide describes methodology and practices intended to be completely consistent with the International Organization for Standardization (ISO) 9000 series of standards and Guide 25 – 1990 (1).²

1.6 The values stated in inch-pound units are to be regarded as the standard. The values given in parentheses are for information only.

1.7 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

¹ This guide is under the jurisdiction of ASTM Committee D19 on Water and is the direct responsibility of Subcommittee D19.02 on Quality Systems, Specification, and Statistics.

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² The boldface numbers in parentheses refer to the list of references at the end of this guide.

2. Referenced Documents

2.1 ASTM Standards:³

- D1129 Terminology Relating to Water
- D1193 Specification for Reagent Water
- D2777 Practice for Determination of Precision and Bias of Applicable Test Methods of Committee D19 on Water
- D3370 Practices for Sampling Water from Closed Conduits
- D3694 Practices for Preparation of Sample Containers and for Preservation of Organic Constituents
- D4210 Practice for Intralaboratory Quality Control Procedures and a Discussion on Reporting Low-Level Data (Withdrawn 2002)⁴
- D4375 Practice for Basic Statistics in Committee D19 on Water
- D4447 Guide for Disposal of Laboratory Chemicals and Samples
- D4840 Guide for Sample Chain-of-Custody Procedures
- D4841 Practice for Estimation of Holding Time for Water Samples Containing Organic and Inorganic Constituents
- D5172 Guide for Documenting the Standard Operating Procedures Used for the Analysis of Water
- D5847 Practice for Writing Quality Control Specifications for Standard Test Methods for Water Analysis
- E456 Terminology Relating to Quality and Statistics
- E548 Guide for General Criteria Used for Evaluating Laboratory Competence (Withdrawn 2002)⁴

3. Terminology

3.1 For definitions of terms used in this guide, refer to Terminologies D1129, D4375, and E456, Guide E548, and ASTM MNL 7 (2).

³ For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

⁴ The last approved version of this historical standard is referenced on www.astm.org.