FOREWORD

National Institute of Standards and Technology (NIST) Handbook (HB) 112, "Examination Procedure Outlines (EPOs) For Commercial Weighing and Measuring Devices," was first published in 1973 by the National Bureau of Standards, Weights and Measures Program, which is now the NIST Office of Weights and Measures (OWM). NIST developed these EPOs and compiled them into this handbook to serve as a guide for the field examination of commercial weighing and measuring devices. It includes inspection and test procedures, with code references to NIST Handbook 44, "Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices." The EPOs includes the *minimum* recommended procedures to be used in official inspection and testing of commercial weighing and measuring equipment. Regulatory officials and service companies may find the need to conduct additional testing based upon the results of an examination or the circumstances surrounding the examination.

The EPOs in this document have been updated to include references to the 2015 edition of NIST Handbook 44 and to recognize electronic equipment. Some of the EPOs that appeared in the original version of NIST Handbook 112 have not been updated and are not included in this document.

Although this publication was prepared primarily for use by weights and measures officials of the federal, state, and local jurisdictions, it should also be useful to manufacturers and other commercial and industrial organizations and individuals involved in the design, sale, service, or use of weighing and measuring devices.

This handbook conforms to the concept of primary use of SI (metric) measurements recommended in the Omnibus Trade and Competitiveness Act of 1988 by citing SI units before U.S. customary units where both units appear together and placing separate sections containing requirements in SI units before corresponding sections containing requirements in U.S. customary units. In some cases, however, common trade practice is currently restricted to the use of U.S. Customary units; therefore, some examples in this Handbook will continue to specify only U.S. Customary units until the industry achieves a broad consensus on the permitted SI units.

In accord with NIST policy, the meter/liter spellings are used in this document.