Extracts from the
CALIFORNIA CODE OF REGULATIONS (CCR)
TITLE 4, DIVISION 9

WEIGHTS AND MEASURES FIELD REFERENCE MANUAL (2020)

List of Links to:
Office of Administrative Law (OAL) Regulations §§ 4000 - 4900
NIST Handbook 44 Text, Amendments and Editorial Changes §§ 4000 - 4002
NIST Handbook 130 UPLR Text, Amendments and Editorial Changes §§ 4510 - 4511
NIST Handbook 133 Text, Amendments and Editorial Changes §4600

CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE
DIVISION OF MEASUREMENT STANDARDS
DISCLAIMER

This document represents the Division of Measurement Standards’ field manual for enforcing regulations pertaining to weights and measures in California. This field manual is not to be considered as the official Code of Regulations, as published by Barclays Law Publishers.

To find the official version of the California Code of Regulations (CCR) Title 4, Division 9, visit the California Office of Administration Law (OAL) at:

http://ccr.oal.ca.gov/linkedslice/default.asp?SP=CCR-1000&Action=Welcome

The CCR may also be accessed at http://oal.ca.gov/ by selecting the link Titled “California Code of Regulations” under the list of “Sponsored Links” in the left column on the OAL Home page.

For information concerning the contents of this document, please contact the Division of Measurement Standards by e-mail at dms@cdfa.ca.gov.

REFERENCED PUBLICATIONS

NIST Handbook 44 (2020 Edition) - Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices as adopted by the 104th National Conference on Weights and Measures in July 2019 is available at:


NIST Handbook 130 (2020 Edition) - Uniform Laws and Regulations in the Areas of Legal Metrology and Engine Fuel Quality as adopted by the 104th National Conference on Weights and Measures in July 2019 is available at:


NIST Handbook 133 (2020 Edition) - Checking the Net Contents of Packaged Goods as adopted by the 104th National Conference on Weights and Measures in July 2019 is available at:


Article 1. National Uniformity, Exceptions and Additions §§ 4000-4002.11., §§ 4003-4009.6. REPEALED

§4000. National Uniformity and California Type Evaluation Fees


Link to Amendments/Editorial Changes – 2020 Edition (PDF)

Handbook 44 Introduction.

Section 1.10. General Code AMENDED
Section 2.20. Scales AMENDED
Section 2.21. Belt Conveyor Scale Systems
Section 2.22. Automatic Bulk Weighing Systems AMENDED
Section 2.23. Weights
Section 2.24. Automatic Weighing Systems AMENDED
Section 2.25. Weigh-in-Motion Systems Used for Vehicle Enforcement Screening–Tentative Code
Section 3.30. Liquid-Measuring Devices AMENDED
Section 3.31. Vehicle-Tank Meters AMENDED
Section 3.32. Liquefied Petroleum Gas and Anhydrous Ammonia Liquid-Measuring Devices AMENDED
Section 3.33. Hydrocarbon Gas Vapor-Measuring Devices AMENDED
Section 3.34. Cryogenic Liquid-Measuring Devices AMENDED
Section 3.35. Milk Meters AMENDED
Section 3.36. Water Meters AMENDED
Section 3.37. Mass Flow Meters AMENDED
Section 3.38. Carbon Dioxide Liquid–Measuring Devices AMENDED
Section 3.39. Hydrogen Gas–Measuring Devices AMENDED
Section 3.40. Electric Vehicle Fueling Systems AMENDED
Section 4.40. Vehicle Tanks Used as Measures
Section 4.41. Liquid Measures
Section 4.42. Farm Milk Tanks
Section 4.43. Measure-Containers
Section 4.44. Graduates
Section 4.45. Dry Measures
Section 4.46. Berry Baskets and Boxes
Table of Contents – Section 4000. National Uniformity Continued:

Section 5.50. Fabric-Measuring Devices
Section 5.51. Wire- and Cordage-Measuring Devices
Section 5.52. Linear Measures
Section 5.53. Odometers
Section 5.54. Taximeters AMENDED
Section 5.55. Timing Devices AMENDED
Section 5.58. Multiple Dimension Measuring Devices AMENDED
Section 5.59. Electronic Livestock, Meat, and Poultry Evaluation Systems and/or Devices
Section 5.60. Transportation Network Measurement Systems – Tentative Code

Handbook 44 Appendices

Appendix A. Fundamental Considerations
Appendix B. Units and Systems of Measurement
Appendix C. General Tables of Units of Measurement
Appendix D. Definitions AMENDED

Section 4000.1. California Type Evaluation Program (CTEP) - Application
Section 4000.2. CTEP Evaluation Fees
Section 4000.3. CTEP Annual Administrative Fee

Section 4001. Exceptions. See Barclays for actual Text

The following regulations in Handbook 44 are not adopted or incorporated by reference.

1.10. General Code.

G-S.1.2. Remanufactured Devices and Remanufactured Main Elements.

(b) [NOT ADOPTED]
(c) [NOT ADOPTED]
(d) [NOT ADOPTED]

2.20. Scales.

S.1.8.4. Customer’s Indications.
N.3. Minimum Test Weights and Test Loads*.

UR.2.6.1. Vehicle Scales.

UR.3.7. Minimum Load on a Vehicle Scale.


UR.2.2. Ticket Printer; Customer Ticket.
   N.4.1.1. Temperature Compensation.  Automatic
   UR.2.3. Vapor Return Line.

   S.4.3. Temperature Compensation.

   S.1.3.1.1. Compressed Natural Gas Used as an Engine Fuel.
   S.1.3.1.2. Liquefied Natural Gas Used as an Engine Fuel.
   S.5.3. Marking of Equivalent Conversion Factor for Liquefied Natural Gas.
   UR.3.1.1. Marking of Equivalent Conversion Factors for Compressed Natural Gas.
   UR.3.1.2. Marking of Equivalent Conversion Factor for Liquefied Natural Gas.

   A.2. Exceptions
   (c). Devices used for dispensing a hydrogen gas with a hydrogen fuel index lower than 99.97 % and concentrations of specified impurities that exceed level limits.
   A.4. Type Evaluation.
   N.3. Test Drafts.
   N.4.2. Gravimetric Tests.
   N.4.3. PVT Pressure Volume Temperature Test.
   T.2. Tolerances.
   Table T.2.

3.40. Electric Vehicle Fueling Systems
   A.4. Type Evaluation.
   S.1.3.2. EVSE Value of Smallest Unit.
   S.2.4.1. Unit Price.
   S.2.4.2. Equipment Capacity and Type of Voltage.
   S.2.7. Indication of Delivery.
Table of Contents – Section 4001. Exceptions. Continued:
  S.3.5. Temperature Range for System Components.
  S.5.2. EVSE Identification and Marking Requirements.
  N.2. Starting Load Test.
  T.2. Load Test Tolerances.
  T.2.1. EVSE Load Test Tolerances.

5.60. Transportation Network Measuring System

Section 5.60. Transportation Network Measuring System – Tentative Code

Appendix D. Definitions for:
  Remanufactured Devices.
  Remanufactured Element.
  Repaired Devices.
  Repaired Element.
  Diesel Gallon Equivalent (DGE).
  Electricity as Vehicle Fuel.
  Gasoline Gallon Equivalent (GGE).

Section 4002. – Additional Language. See WWW.OAL.CA.GOV for actual Text.

These requirements are different than, or in addition to, the requirements of Handbook 44

§ 4002.1. General Code (1.10.)
  (a) Type Approval Use.

§ 4002.2. Scales (2.20.)
  (a) Minimum Load on a Vehicle Scale.
  (b) Class III, Class III L and Unmarked Devices Used for Recycling.
  (c) Livestock Scales Not Equipped with Balance Indicator.
  (d) Customer's Indications.

§ 4002.3. Vehicle-Tank Meters. (3.31.)
  UR.2.2. Ticket Printer; Customer Ticket.

§ 4002.4. Liquefied Petroleum Gas and Anhydrous Ammonia Liquid-Measuring Devices (3.32.)
  (a) Temperature Compensation.
  (b) Non-applicable Provisions of Handbook 44, Section, 3.32., S.3.1 under certain conditions.
  (c) Wholesale Devices Equipped With Automatic Temperature Compensating Systems.
  (d) Vapor Return Line.
  (e) Signs.

§ 4002.4.1. REPEALED

(01/01/2020) FRM-4
Table of Contents – Section 4002. – Additional Language. Continued:

§ 4002.5. Hydrocarbon Gas Vapor-Measuring Devices. (3.33.) Temperature Compensation
   (a) Leak Test.
   (b) Temperature Compensation.
   (c) Retention of Customer Invoices.

§ 4002.6. Water Meters (3.36.) REPEALED

§ 4002.7. Farm Milk Tanks. (4.42.)
   (a) Calibration and Installation.

§ 4002.8. Liquid-Measuring Devices. (3.30.)
   (a) Wholesale Devices Equipped With Automatic Temperature Compensating Systems.

§ 4002.9. Hydrogen Gas-Measuring Devices. (3.39.) (Pending OAL Approval)
   S.5.2. Location of Accuracy Class 3.0, 5.0, and 10.0 Information:
      Note:
      EXAMPLE:

N.3. Test Drafts.
N.4.2. Gravimetric Tests.
N.4.3. PVT Pressure Volume Temperature Test.
T.2. Tolerances.
   Table T.2. Accuracy Classes and Tolerances for Hydrogen Gas-Measuring Devices

§ 4002.10. Mass Flow Meters. (3.37.)
   S.1.3.1.1. Compressed Natural Gas Used as an Engine Fuel.
   S.1.3.1.2. Liquefied Natural Gas Used as an Engine Fuel.
   S.5.3. Marking of Diesel Volume Equivalent Conversion Factors for Liquefied Natural Gas.
   UR.3.1.1. Marking of Equivalent Conversion Factor for Compressed Natural Gas.
   Appendix D – Definitions: diesel gallon equivalent (DGE).]
   Appendix D – Definitions: gasoline gallon equivalent (GGE).

   A.1.1. Effective Date for AC EVSE.
   A.1.2. Effective Dates for DC EVSE.
   S.1.3.2. EVSE Value of Smallest Unit.
Table of Contents – Section 4002. – Additional Language. Continued:

S.2.4.1. Unit Price.
S.2.4.2. Equipment Capacity and Type of Voltage.
S.2.7. Indication of Delivery.
S.3.5. Temperature Range for System Components.
S.5.2. EVSE Identification and Marking Requirements.
N.2. Starting Load Test.
T.2. Load Test Tolerances.

Table T.2. Accuracy Classes and Tolerances for EVSE

Definition. electricity as vehicle fuel. - Electrical energy transferred to or stored onboard an electric vehicle primarily for the purpose of propulsion. [3.40]

Article 2. § 4010. Specifications and Tolerances and Other Technical Requirements for Commercial Weighing and Measuring Devices Not Included in Handbook 44.

§§ 4010.1-4011.5. REPEALED

Article 2.1. §§ 4012-4012.5. Liquefied Petroleum Gas Tanks When Mounted on Highway Vehicles and Used as Measures

§§ 4013-4026.6. REPEALED

Article 2.2. §§ 4027-4027.5. Electric Watt-Hour Meters

§§ 4027.6-4028.6 REPEALED

Article 2.3. §§ 4029-4029.6. Carbon Dioxide Liquid Measuring Devices

Chapter 2. Special Equipment


Article 2. §§ 4054-4055. Procedures for Type Approval and Field Compliance Testing of Vapor Recovery Systems

Chapter 3. Device Inspection.

Article 1. § 4070. Frequency of Inspection

Article 2. §§ 4071-4074. Alternatives to Specified Frequency of Inspection

Article 3. § 4075. Annual Device Administrative Fee

Chapter 4. Registered Service Agencies. §§ 4080-4088.


Chapter 6. Automotive Products Specifications.

Article 1. § 4100. Brake Fluid Standards.

Article 2. § 4112. Brake Fluid Labeling. §§ 4110-4111. REPEALED

Article 3. Automatic Transmission Fluid Standards - §§ 4120-4126. REPEALED

Article 4. Automatic Transmission Fluid Registration - § 4130. REPEALED

Article 5. §§ 4140-4149. Engine Fuel Standards

Article 6. §§ 4150-4152. Engine Oil Labeling and Exemptions
Table of Contents – Continued:

**Article 7. §§ 4160-4171.** Labeling and Specifications of Antifreezes and Coolant.

**§§ 4172-4175. REPEALED**

**Article 8. §§ 4180-4181.** Hydrogen

**Article 9. §§ 4190-4191.** Specifications for Dimethyl Ether Used as a Motor Vehicle Fuel

**Chapter 7. §§ 4200-4207. Advertising of Gasoline and Other Motor Vehicle Fuels**

**Chapter 8. §§ 4300-4309. Motor Oil Fee**

**Chapter 9. Weighmaster Enforcement**

**Article 1. §§ 4401-4403.** General Provisions.

**Article 1. § 4400. REPEALED**

**Article 2. §§ 4410.** Weighmaster Certificates.

**Article 2. §§ 4411-4415. REPEALED**

**Article 3. §§ 4420-4423.** Predetermined Individual Tare Weights

**Article 4. §§ 4430-4433.** Seasonal Tare Weights

**Article 5. §§ 4440-4446.** Common Tare Weights

**Article 6. § 4450.** Limits of Permissible Error

**Article 7. §§ 4460-4461.** Average Tare Weights

**Article 8. §§ 4470-4472.** Volumetric Conversion to Weight of Squid

**Article 9. §§ 4470-4472.** Director’s Approval of Inspection of Weighmaster Records

**Article 10. §§ 4490-4493.** Timber Tare Weights

**Article 11. §§ 4495-4495.6.** Multiple Draft Weighing Operations

**Article 12. §§ 4496-4596.6.** Unattended Weighing Systems

**Chapter 10. Quantity Control**

**Article 1. §§ 4500-4503.** General.


**Article 2. §§ 4513-4522 REPEALED**

**Article 3. §§ 4530** Wood for Fuel Purposes (Rulemaking Proposed December 27, 2019).

**Chapter 11. Sampling and Testing Procedures for Determining the Net Contents of Packaged Commodities**

**Article 1. §4600. National Uniformity.**

**NIST Handbook 133 - 2020 Edition.** Checking the Net Contents of Packaged Goods, including Amendments Changes DOC | PDF AMENDED

**Article 1. §§ 4601-4626. REPEALED**

**Article 2. §§ 4650-4657. REPEALED**
Table of Contents – Continued:

**Chapter 12. Administration**
- **Article 1. §§ 4700-4701.** Permit Reform Act
- **Article 2. §§ 4800-4802.** Weights and Measures Penalty Guidelines
- **Article 3. § 4900.** Applicant Verification Regulations