



CALIFORNIA DEPARTMENT OF
FOOD & AGRICULTURE

Karen Ross, Secretary

January 3, 2018

DMS Notice
G – 18 – 02R
Discard: January 2019

TO: WEIGHTS AND MEASURES OFFICIALS

SUBJECT: 2018 Field Reference Manual and Revision Index (Revised)

The 2018 Field Reference Manual (FRM) and Revision Index are now posted and available on the Division of Measurement Standards' (DMS) website at:

www.cdffa.ca.gov/dms/publications.html

On December 29, 2017, the Office of Administrative Law approved proposed amendments to the California Code of Regulations (CCR) Title 4, Division 9 Chapter 8. Motor Oil Fee (effective January 1, 2018). There were no other new regulations or amendments added in 2017 to CCR Title 4, Division 9 for 2018 other than updates to language adopted by reference from the National Institute of Standards and Technology (NIST) Handbooks 44, 130 and 133.

The Revision Index as well as the NIST Handbooks' Index of Amendments and Editorial Changes are included as an attachment to this Notice.

If you have any questions, please contact Tammy Sulli, at (916) 229-3000 or by email at Tammy.Sulli@cdffa.ca.gov.

Sincerely,

Kristin Macey
Director

cc: Gary Leslie, County/State Liaison, CDFA

Attachments



2018
Division of Measurement Standards
Field Reference Manual Revision Index

Revised Sections

[Cover Page](#) [Revision Index](#)
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See the 2018 Field Reference Manual Revision Index for changes to the language in NIST Handbooks 44, 130 and 133.

NEW: NIST Handbook 133-2018 (current edition) is now part of the 2018 Field Reference Manual CCR Chapter 11, §4600. National Uniformity.

Chapter 8. Motor Oil Fee

§ 4300. Definition of “Motor Oil” and Other Terms for Purposes of Fee Responsibility.

§ 4302. Fee Responsibility and Exemption.

§ 4304. Fees and Remittance Forms.

§ 4306. Penalties.

§ 4307. Refund of Fees Paid.

§ 4308. Records.

Revised Form: [“Motor Oil Fee Remittance Form”](#)

(Form 41-054, Rev. 1/1/18):

(<https://www.cdfa.ca.gov/dms/programs/petroleum/MotorOilFeeRemittanceForm.pdf>)

2017
Division of Measurement Standards
Field Reference Manual Revision Index

Revised Sections

NO REGULATIONS ADDED or AMENDED DURING 2016

Changes to the language in NIST Handbooks 44, 130 and 133 follow the 2017 Field Reference Manual Revision Index

Editor’s Note: CCR Title 4. Division 9. Article 10. Chapter 3. Wood for Fuels Purposes is no longer published in the Field Reference Manual. BPC Section 12211 superseded the CCR when language was added in 1996/1997 stating that the secretary shall adopt by reference the package checking procedures recommended by the National Conference on Weights and Measures and published in the current edition of the National Institute of Standards and Technology (NIST) Handbook 133, “Checking the Net Contents of Packaged Goods”.

NEW: NIST Handbook 133-2017 (current edition) is now part of the 2017 Field Reference Manual CCR Chapter 11, §4600. National Uniformity.

NIST Handbook 44 Amendments for the 2018 Edition

The following table lists the codes, paragraphs, and pages in which the 102nd National Conference on Weights and Measures made amendments. In the column headed "Action," changes are noted as "added," "amended," "deleted," or "renumbered." Each code, section, or paragraph that has been changed will be noted as "Added 2017" or "Amended 2017."

| SECTION | CODE | S&T ITEM NO. | PARAGRAPH | ACTION | HB-44 PAGE |
|---------|--|--------------|--|---|------------|
| 2.20. | Scales | 3200-2 | S.1.2.2.2. Class I and II Scales Used in Direct Sales. | Added | 2-9 |
| | | | S.1.2.2.2. Class III and IIII Scales. | Renumbered to S.1.2.2.3. | 2-9 |
| 3.30. | Liquid-Measuring Devices | 3300-1 | S.2.1. Air/Vapor Elimination. | Amended | 3-12 |
| | | | S.2.1.1. Air/Vapor Elimination on Loading Rack Measuring Systems. | Amended | 3-12 |
| 3.31. | Vehicle-Tank Meters | 3301-1 | S.2.1. Vapor Elimination. | Amended | 3-34 |
| | | 3301-3 | S.5.7. Meter Size. | Deleted | 3-38 |
| 3.32. | Liquefied Petroleum Gas and Anhydrous Ammonia Liquid-Measuring Devices | 3302-3 | N.4.2.3. Wholesale Devices. | Amended | 3-56 |
| 3.35. | Milk Meters | 3305-1 | S.2.1. Air/Vapor Elimination. | Amended | 3-89 |
| 3.36. | Water Meters | 3306-1 | S.2.2. Batching Measuring Systems Only. | Amended Title | 3-99 |
| | | | S.2.2.1. Air/Vapor Elimination, Batching Measuring Systems. | Amended | 3-99 |
| 3.37. | Mass Flow Meters | 3307-1 | S.3.3. Air/Vapor Elimination. | Amended | 3-110 |
| | | | S.3.3.1. Air/Vapor Elimination on Loading Rack Liquid Measuring Systems. | Amended | 3-110 |
| 5.54 | Taximeters | 3504-1 | A.2. Exceptions. | Amended | 5-27 |
| | | | S.1.2.1. Time Mechanism. | Added | 5-28 |
| | | | S.1.2.2. Distance Mechanism. | Added | 5-28 |
| | | | S.1.3. Visibility of Indications. | Reorganized into title (S.1.3.) and new subparagraph S.1.3.1. and Amended | 5-28 |

| SECTION | CODE | S&T ITEM NO. | PARAGRAPH | ACTION | HB-44 PAGE |
|---------------------|---------------------------|-----------------------|--|--------------------------------|------------|
| 5.54 (Continued) | Taximeters (continued) | 3504-1 (continued) | S.1.3.1. Minimum Height of Figures, Words, and Symbols. | Renumbered to S.1.3.2. | 5-28 |
| | | | S.1.3.2. Lighting of Indications. | Deleted | 5-28 |
| | | | S.1.3.3. Passenger's Indications. | Amended | 5-28 |
| | | | S.1.4. Actuation of Fare-Indicating Mechanism. | Amended | 5-29 |
| | | | S.1.5.3. Distance Not Recording. | Added | 5-29 |
| | | | S.1.9. Recorded Representation. | Amended | 5-29 |
| | | | S.2.1. Initial Time and Distance Intervals. | Amended | 5-31 |
| | | | S.4. Interference. | Amended | 5-31 |
| | | | S.5. Provision for Security Seals. | Amended | 5-31 |
| | | | Table S.5. Categories of Device and Methods of Sealing | Added | 5-32 |
| | | | S.5.1. Taximeter Connected to Networked Systems. | Added | 5-33 |
| | | | S.5.2. Taximeters Calibrated to Specific Values. | Added | 5-33 |
| | | | S.7. Measurement Signal Loss. | Added | 5-33 |
| | | | S.7.1. Intermittent Trip Data Loss. | Added | 5-33 |
| | | | S.7.2. Significant Trip Data Loss. | Added | 5-33 |
| | | | S.7. Anti-Fraud Provisions, Electronic Taximeters. | Renumbered to S.8. and Amended | 5-34 |
| | | | N.1.1. Test Methods. | Amended | 5-34 |
| | | | N.1.2.1. Taximeters Using Measurement Data Sources from Other Than Rotation of the Wheels; N.1.2.1.1. Testing, General; and N.1.2.1.2. Repeatability Testing, Taximeters Using Measurement Data Sources Other Than Rotation of Wheels. | Added | 5-34 |
| | | | N.1.3.1. Measurement Data Based on the Rotation of the Vehicle's Wheels. | Added | 5-35 |
| | | | N.1.3.1. Vehicle Lading. | Renumbered | 5-35 |

| SECTION | CODE | S&T ITEM NO. | PARAGRAPH | ACTION | HB-44 PAGE |
|---------------------|---|-----------------------|--|-----------------------------------|------------|
| 5.54 (Continued) | Taximeters (continued) | 3504-1 (continued) | | to N.1.3.1.1. | |
| | | | N.1.3.2. Tire Pressure. | Renumbered To N.1.3.1.2. | 5-35 |
| | | | N.1.3.2. Taximeters Using Other Measurement Data Sources. | Added | 5-35 |
| | | | N.1.3.2.1. Roads. | Added | 5-35 |
| | | | N.1.3.2.2. Testing for Environmental Influences. | Added | 5-35 |
| | | | N.3. Interference Test. | Amended | 5-35 |
| | | | T.1.3. On Interference Tests and T.1.3.1. (untitled) | Amended and Merged into T.1.3. | 5-36 |
| | | | T.2. Tests Using Transfer Standards. | Added | 5-36 |
| | | | UR.1. Inflation of Vehicle Tires. | Amended | 5-37 |
| | | | UR.2. Position and Illumination of Taximeter. | Amended | 5-37 |
| 5.58. | Multiple Dimension Measuring Devices | 3508-1 | S.1.7. Minimum Measurement. | Amended | 5-79 |
| | | | S.1.8. Indications Below Minimum and Above Maximum. | Amended | 5-79 |
| 5.60. | Transportation Network Measurement Systems – Tentative Code | 3600-6 | New Code | Added | 5-93 |
| Appendix D | Definitions | 3504-1 | location services | Added | D-16 |

NIST Handbook 44 Editorial Changes for the 2018 Edition

| SECTION | CODE | PARAGRAPH | ACTION | HB-44 PAGE |
|---------|--|----------------------------------|--|------------|
| 3.32. | LPG and Anhydrous Ammonia Liquid- Measuring Devices | S.1.4.1.(a) | Corrected “electric” to “electronic” | 3-49 |
| | | S.1.6.1. Travel of Indicator. | Corrected 5 L to <u>4 L</u> (1 gal) | 3-52 |

| NIST Handbook 44 Editorial Changes for the 2018 Edition | | | | |
|--|------------------------------------|---|--|------|
| 5.54. | Taximeter | S.1.9.1. Multiple Recorded Representations and S.1.9.1.1. Duplicate Receipts. | Combined S.1.9.1. (a heading only) with paragraph S.1.9.1.1. into a single paragraph titled S.1.9.1. Multiple Recorded Representations – Duplicate Receipts. | 5-30 |
| Appendix C. | General Tables of Units of Measure | Section 4. Tables of Units of Measurement | Reformatted tables in Section 4 and added instructions on table use. | C-8 |
| | | | Added Units of Length – Thickness Measurement | C-8 |
| | | | Added Units of Pressure | C-15 |
| | | | Added Conversion Equations for Temperature | C-15 |
| | | Section 5. Tables of Equivalents/Units of Length | Added 1 mil = (25.4 micrometers (exactly)) | C-16 |

| NIST Handbook 130 Amendments for the 2018 Current Edition | | | | |
|--|------------------------|---------|--------|-------------|
| <p>The following table lists the laws and regulations amended by the 102nd (2017) National Conference on Weights and Measures (NCWM). As appropriate, the text on the cited pages indicates the changes to the law or regulation, section, or paragraph as “Added 2017” or “Amended 2017.” Unless otherwise noted, the effective date of the regulations added or amended in 2017 is January 1, 2018.</p> | | | | |
| Law or Regulation | L&R Committee Item No. | Section | Action | HB-130 Page |
| A. Uniform Packaging and Labeling Regulation | NONE | | | |

| NIST Handbook 130 Editorial Changes to the Uniform Package and Labeling Regulation for the 2018 Edition | | | |
|--|---|---|-------------|
| Law or Regulation | Section | Action | HB-139 Page |
| A. Uniform Package and Labeling Regulation | 12.2. Magnitude of Permitted Variations. [NOT ADOPTED – CCR § 4511. Exceptions] | Removed text “... tables of the latest version of NIST ...” | 86 |

NIST HB 133 Amendments for the 2018 Edition

The following table indicates the items amended by the 102nd (2017) National Conference on Weights and Measures (NCWM). As appropriate, the text on the cited pages indicates the changes to a Handbook 133 section, or paragraph as “Added 2015” or “Amended 2016.” Unless otherwise noted, the effective date of the regulations added or amended in 2017 is January 1, 2018.

| Chapter | L&R Committee Item No. | Section | Action | HB-133 Page |
|---|------------------------------|---|---------------|----------------|
| Chapter 1. General Information | 2600-1 | 1.2.1. Inspection Lot | Amended | 6 |
| Chapter 3. Test Procedures – For Packages Labeled by Volume | 2600-1 | 3.10. Mulch and Soils Labeled by Volume, Table 3-4. Specifications for Test Measures for Mulch and Soils | Amended | 68 |
| | | 3.10.2. Test Procedure | Amended | 70 |
| Chapter 4. Test Procedures – Packages Labeled by Count, Linear Measure, Area, Thickness, and Combinations of Quantities | 2600-4 | 4.5. Polyethylene Sheeting, Bags, and Liners | Title Amended | 122 |
| | | 4.5.2. a. Test Procedure for Polyethylene Sheeting | Amended | 123 |
| | | 4.5.2. b. Test Procedure for Polyethylene Bags and Liners. | Added | 126 |

NIST Handbook 133 Editorial Changes for the 2018 Current Edition

The following items were deemed editorial in nature based on the following criteria: 1) the modified text did not change the meaning or procedure outlined, 2) modified text corrected an omission or clarified how the text was written, or 3) the item itself was reformatted and relocated in the text to make the organization of the content more meaningful.

| Chapter | Section | Action | HB-133 Page |
|---|---|--|----------------|
| Chapter 2. Test Procedures – Packages Labeled by Weight - Gravimetric Testing | 2.3.5.2. Special Procedures for Determining Tare | Modified for clarity of intent. a. Aerosol <u>and Other Pre-Pressurized</u> Containers Aerosol <u>and other pre-pressurized</u> containers | 21 |
| | 2.4.2. Test Procedure | 5.(c) corrected the Step <u>4(d)</u> to <u>5(d)</u> . | 29 |
| Chapter 3. Test Procedures – For Packages Labeled by Volume | 3.15. Test Procedure for Verifying Volume Declarations on Packages of Animal Bedding, 3.15.1. Test Equipment | Changed reference to Worksheet | 98 |
| Appendix B. Random Numbers Table | Random Starting Place | Added an illustration for finding/using random numbers tables | 158 |
| Appendix C. Model Inspection Report Forms | Borax Audit Worksheet | Corrected format and corrected the dry measure for mL in number 8 and formula in number 11. | 186 |
| Appendix E. General Tables of Units of Measurement | Section 4. Tables of Units of Measure | Added instructions for using the tables and reformatted tables. | 200 |
| | Units of Length – Thickness Measurement | Table Added | 201 |
| | Units of Pressure | Table Added | 210 |
| | Conversion Equations for Units of Temperature | Table Added | 210 |
| | Units of Length | Added 25.4 micrometer (exactly) to the 1 mil unit | 212 |