



CALIFORNIA DEPARTMENT OF
FOOD & AGRICULTURE
Karen Ross, Secretary

January 3, 2019

DMS Notice
G – 19 – 02
Discard: January 2020

TO: WEIGHTS AND MEASURES OFFICIALS

SUBJECT: 2019 Field Reference Manual and Revision Index

The 2019 Field Reference Manual (FRM) and Revision Index are now posted and available on the Division of Measurement Standards' (DMS) website at:

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

On January 24, 2018, the Office of Administrative Law approved the proposed amendments to the Natural Gas Motor Vehicle Fuel Specifications in the CCR Title 4, Div. 9, Ch. 1 §§ 4001 and 4002.10, and Ch. 7 §§ 4200, 4201, 4206 and 4207. These changes became effective April 1, 2018.

There were no other new regulations or amendments added in 2018 to CCR Title 4, Division 9 for 2019 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 dms@cdfa.ca.gov.

Sincerely,

Kristin Macey
Director

cc: Hyrum Eastman, County/State Liaison, CDFA

Attachment



2019 Division of Measurement Standards Field Reference Manual Revision Index	
Revised Sections	
Cover Page Disclaimer Page	Revision Index Table of Contents
<p>See the 2019 Field Reference Manual Revision Index for changes to the language in; NIST Handbook 44 §§4000, 4001, & 4002, NIST Handbook 130 §§ 4510, 4511, & 4512 and NIST Handbook 133 § 4600.</p> <p>NEW: NIST Handbook 133-2019 (current edition) is now part of the 2019 Field Reference Manual CCR Chapter 11, §4600. National Uniformity.</p>	
<p>Office of Administrative Law approved the proposed amendments to the Natural Gas Motor Vehicle Fuel Specifications that became effective in April 1, 2018:</p> <ul style="list-style-type: none"> • CCR Title 4, Div. 9, Ch. 1 §§ 4001 and 4002.10 and • CCR Title 4, Div. 9, Chapter 7, §§ 4200, 4201, 4206 and 4207. 	

2018 Division of Measurement Standards Field Reference Manual Revision Index	
Revised Sections	
Cover Page Disclaimer Page	Revision Index Table of Contents
<p>See the 2018 Field Reference Manual Revision Index for changes to the language in NIST Handbooks 44, 130 and 133.</p> <p>NEW: NIST Handbook 133-2018 (current edition) is now part of the 2018 Field Reference Manual CCR Chapter 11, §4600. National Uniformity.</p>	
<p>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.</p>	<p>§ 4307. Refund of Fees Paid. § 4308. Records. Revised Form: <u>“Motor Oil Fee Remittance Form”</u> (Form 41-054, Rev. 1/1/18): (https://www.cdfa.ca.gov/dms/programs/petroleum/MotorOilFeeRemittanceForm.pdf)</p>

NIST Handbook 44 Amendments for the 2019 Edition					
The following table lists the codes, paragraphs, and pages in which the 102 nd 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 2018" or "Amended 2018."					
SECTION	CODE	S&T ITEM NO.	PARAGRAPH	ACTION	HB- 44 Page
2.20.	Scales	SCL-6	S.1.2.2.3. Deactivation of "d" Resolution.	Added and renumbered subsequent paragraphs	2-9
2.22.	Automatic Bulk Weighing Systems	ABW-4	A.2. Exceptions.	Added and renumbered subsequent paragraphs	2-75
3.30.	Liquid-Measuring Devices	LMD-2	S.1.6.7. Recorded Representations	Amended	3-11
			S.1.6.8. Recorded Representations for Transactions Where a Post-Delivery Discount(s) is Provided.	Amended	3-11
			UR.3.4. Printed Ticket.	Amended	3-24
3.31.	Vehicle-Tank Meters	VTM-1	S.3.1. Diversion of Measured Liquid.	Amended	3-36
			S.3.1.1. Means for Clearing the Discharge Hose.	Added	3-37
			UR.2.6. Clearing the Discharge Hose.	Added	3-43
			UR.2.6.1. Records.	Added	3-43
3.32.	LPG and Anhydrous Ammonia Liquid-Measuring Devices	LPG-1	S.2.1. Air/Vapor Elimination.	Amended	3-52

Attachment

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3.34.	Cryogenic Liquid-Measuring Devices	CLM-3	S.2.1. Air/Vapor Elimination.	Amended	3-77
3.36.	Water Meters	WTR-2	S.2.1. Provisions for Sealing.	Amended	3-99
			Table S.2.1. Categories of Device and Methods of Sealing.	Added	3-99
3.38.	Carbon Dioxide Liquid-Measuring Devices	CDL-3	S.2.1. Air/Vapor Elimination.	Amended	3-125
5.54.	Taximeters	TXI-1	S.1.2.2. Distance Mechanism.	Amended	5-28
			S.1.5.3. Distance Not Recording.	Amended	5-29
Appendix D	Definitions	ABW-4	batching systems	Added	D-7

NIST Handbook 44 Editorial Changes for the 2018 Edition				
SECTION	CODE	PARAGRAPH	ACTION	HB-44 PAGE
3.34.	Cryogenic Liquid-Measuring Devices	Table N.4. Density or Volume Correction Factors	Updated URL (web link) to make it generic.	3-81
3.39.	Hydrogen Gas-Measuring Devices – Tentative Code	N.7. Density	Updated the reference documents and URLs.	3-145
4.41.	Liquid Measures	S.1. Units	Added preamble to clarify (a) applies when marked with SI units and (b) applies when marked in U.S. customary units.	4-11

NIST Handbook 44 Editorial Changes for the 2018 Edition				
SECTION	CODE	PARAGRAPH	ACTION	HB-44 PAGE
Appendix C	General Tables of Units of Measurement	Avoirdupois Units of Mass	Added parentheses around “or long”: 20 gross (or long) hundredweights = 1 gross (or long) ton	C-6
Appendix D	Definitions	basic tolerances	Deleted the re-statement of the term being defined “basic tolerances” and streamlined the language for clarity.	D-7
		calibration parameter	- Delete reference to “3.39,” since this is still a tentative code. - Add “5.54,” which should have been added when the “Categories of Devices and Methods of Sealing” table was added to this code.	D-8
		configuration parameter and	- Added “3.31, 3.32, 3.34, 3.35, 3.36, 3.38, 5.54, and 5.58,” which should have been added when the “Categories of Devices and Methods of Sealing” table was added to each of these codes.	D-9
		remote configuration capability		D-24
		commercial equipment	- Add “3.36” and “3.37” since these devices are commonly used in commercial applications.	D-9
		event counter and	- Add “2.24, 3.31, 3.32, 3.34, 3.35, 3.38, and 5.58,” which should have been added when the “Categories of Devices and Method of Sealing” table was added to each of these codes.	D-12
		event logger		D-12
		unit price	- Add “2.20, 3.31, 3.32, and 3.37,” which should have been added when	C-28

NIST Handbook 44 Editorial Changes for the 2018 Edition				
SECTION	CODE	PARAGRAPH	ACTION	HB-44 PAGE
			requirements for computing-type devices and systems were added to these codes.	

NIST Handbook 130 Amendments for the 2019 Current Edition				
<p>The following table lists the laws and regulations amended by the 103rd (2018) 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 2018” or “Amended 2018.” Unless otherwise noted, the effective date of the regulations added or amended in 2018 is January 1, 2019.</p>				
Law or Regulation	L&R Committee Item No.	Section	Action	HB 130 Page
IV. Uniform Regulations				
A. Uniform Packaging and Labeling Regulation	PAL-1	6.12. Supplementary Quantity Declaration Prohibited.	Amended	71
		Note 5	Added	71
		6.14. Qualification of Declaration Prohibited.	Amended	72
		Note 56 .	Renumbered	72
		Note 67 .	Renumbered	72
		Note 78 .	Renumbered	78
		Note 89 .	Renumbered	83
		Note 910 .	Renumbered	85
		Note 1011 .	Renumbered	88
		12.1. Packaging Variations.	Amended	88
	12.2. Magnitude of Permitted Variations.	Amended	89	
	PAL-2	11.8. Packaged Commodities with Labeling Requirements	Amended	84

NIST Handbook 130 Amendments for the 2019 Current Edition

The following table lists the laws and regulations amended by the 103rd (2018) 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 2018” or “Amended 2018.” Unless otherwise noted, the effective date of the regulations added or amended in 2018 is January 1, 2019.

Law or Regulation	L&R Committee Item No.	Section	Action	HB 130 Page
		Specified in Federal Laws <u>and Regulations.</u>		
		Appendix C: Reference Information for Packaged Commodities with Labeling Specifications in Federal Law and Regulation	Added	97
		1.8. Base Gasoline.	Deleted	185
		1. <u>98.</u> Biodiesel	Amended & Renumbered	185
		1. <u>109.</u> Biodiesel Blend.	Amended & Renumbered	185

NIST Handbook 130 Editorial Changes to the Uniform Package and Labeling Regulation for the 2019 Edition

Law or Regulation	Section	Action	HB 130 Page
IV. Uniform Regulations			
A. Uniform Packaging and Labeling Regulations	Table 6.5. SI Units: Mass, Measure	Correction (3) <u>malt (beer) beverages or a commodity</u> that must be maintained ...	65
		Correction/omission from previous update <u>(4) refrigerated food (e.g., milk, dairy products labeled “keep refrigerated”) for which the declaration shall express the volume at 4 °C.</u>	

NIST Handbook 130 Editorial Changes to the Uniform Package and Labeling Regulation for the 2019 Edition			
Law or Regulation	Section	Action	HB 130 Page
		<u>*Other liquids and wine (e.g., for immediate consumption that do not require, but may be refrigerated [shelf stable] such as soft drinks, bottled water) at 20 °C.</u>	

NIST HB 133 Amendments for the 2019 Edition				
<p>The following table indicates the items amended by the 103rd (2018) 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 2017” or “Amended 2018.” Unless otherwise noted, the effective date of the regulations added or amended in 2018 is January 1, 2019.</p>				
Chapter	L&R Committee Item No.	Section	Action	HB-133 Page
Chapter 1. General Information	NET-1	1.2.2. Average Requirements	Amended	7
		1.4.1. Net Quantity of Contents Requirements for Pesticides Labeled with Minimum Net Quantity of Contents Declarations	Added	10
Chapter 2. Test Procedures for Packages Labeled by Weight – Gravimetric Testing	NET-1	2.3.7.2. Average Requirement	Amended	25
Chapter 4. Test Procedures – Packages Labeled by Count, Linear Measure, Area, Thickness, and Combinations of Quantities	MOS-8	4.5.2.a. Test Procedure for Polyethylene Sheeting	Amended	125
Appendix A. Tables	NET-1	Table 1-1. Agencies Responsible for Package Regulations and	Amended	142

		Applicable Requirements (Pesticides)		
	NET-5	Table 1-1. Agencies Responsible for Package Regulations and Applicable Requirements (Meat and Poultry)	Amended	141
Appendix A. Tables	NET-5	Table 2-9. U.S. Department of Agriculture, Meat, Poultry and Siluriformes Groups and Lower Limits for Individual Packages (Maximum Allowable Variations [MAVs])	Title Amended	155

NIST Handbook 133 Editorial Changes for the 2019 Current Edition			
<p>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.</p> <p>Note: For the purposes of this table, the bold, underscored text indicates new language added and bold, strikeout text indicates deleted text.</p>			
Chapter	Section	Action	HB-133 Page
Chapter 3. Test Procedures – For Packages Labeled by Volume	3.9.2.2. Test Procedure	Clarified the instruction to read 2. Open each package in turn, remove and pour the contents <u>from a height of 2 ft,</u> and pass them through the . . .	69
	3.11.2. Test Procedure	Corrected the instruction in 11. <i>Product Density = (gross weight in Step 5) <u>product net weight in Step 10</u> ÷ (the total water volume in Step 7 = <u>volume of tare material in Step 8</u>)</i>	74

NIST Handbook 133 Editorial Changes for the 2019 Current Edition			
<p>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.</p> <p>Note: For the purposes of this table, the bold, underscored text indicates new language added and bold, strikeout text indicates deleted text.</p>			
Chapter	Section	Action	HB-133 Page
	3.13.2. Test Procedure b. Test Procedure for Cylinders Labeled by Volume	5. Updated the reference to NIST Standard Reference Data Base 23 "Reference Fluid Thermodynamic and Transport Properties Database" (REFPROP)	81
	<u>3.14.3. Field Audit Procedure – Bundled and Bagged Firewood</u>	3.14.3. Evaluation Results was broken into two sections. "Field Audit Procedure" is now "3.14.3.	94
	3.14.3. <u>3.14.4.</u> Evaluation of Results	This item was renumbered.	96
	3.15.1. Test Equipment	Corrected referenced table number.	100
	3.15.2. Test Procedure	Corrected note in "5. Volume Determination."	105
Chapter 3. Test Procedures – For Packages Labeled by Volume	3.15.2. Test Procedure.	3.15.2. Test Procedure was broken into two sections. Line 7 was renumbered to "3.15.3. Evaluation of the Test Results and Determination of Pass or Fail" and the following information renumbered and formatted.	105

NIST Handbook 133 Editorial Changes for the 2019 Current Edition			
<p>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.</p> <p>Note: For the purposes of this table, the bold, underscored text indicates new language added and bold, strikeout text indicates deleted text.</p>			
Chapter	Section	Action	HB-133 Page
	<u>3.15.3. Evaluation of the Test Results and Determination of Pass or Fail</u>	This section was split from 3.15.2. Test Procedure.	115
Chapter 4. Test Procedures – Packages Labeled by Count, Linear Measure, Area, Thickness, and Combinations of Quantities	4.3.1. Test Equipment	Corrected omission of “ 1/16 ” in divisions...	122
	4.4. Special Test Requirements for Packages Labeled by Linear or Square Measure (Area)	Updated ASTM Reference	124
	4.5.2. Test Procedures (a) Test Procedure for Polyethylene Sheeting	Made an editorial change to harmonize the content with the NIST Handbook 130 changes.	125
Appendix A. Tables	Table 2-10. Exceptions to the Maximum Allowable Variations for Textiles, Polyethylene Sheeting and Film, Mulch and Soil Labeled by Volume, Packaged Firewood and Stove Wood Labeled by Volume , and Packages Labeled by Count with 50 Items or Fewer, and Specific Agricultural Seeds Labeled by Count.	Title Correction omitted during the 2016 updates.	157

NIST Handbook 133 Editorial Changes for the 2019 Current Edition			
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<p>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.</p>			
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<p>Note: For the purposes of this table, the bold, underscored text indicates new language added and bold, strikeout text indicates deleted text.</p>			
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Chapter	Section	Action	HB-133 Page
Appendix E. General Tables of Units of Measurement	Avoirdupois Units of Mass	Added parentheses around "or long": 20 gross (or long) hundredweights = 1 gross (or long) ton	200