Laws and Regulations (L&R) Committee
2018 Interim Meeting Agenda

Mr. Ethan Bogren, Committee Chair
Westchester County, New York

INTRODUCTION

The L&R Committee will address the items in Table A during the Interim Meeting. Table A identifies the agenda items by reference key, title of item, page number and the appendices by appendix designations. The headings and subjects apply to *NIST Handbook 130 Uniform Laws and Regulations in the Areas of Legal Metrology an Engine Fuel Quality, 2016 Edition*, and *NIST Handbook 133 Checking the Net Contents of Packaged Goods, 2018 Edition*. The first four digits of an item's reference key are assigned from the Subject Series List. The acronyms for organizations and technical terms used throughout the agenda are identified in Table B. In some cases, background information will be provided for an item. The fact that an item appears on the agenda does not mean it will be presented to National Conference on Weights and Measures (NCWM) for a vote. The Committee will review its agenda and may withdraw some items, present some items for information meant for additional study, issue interpretations, or make specific recommendations for change to the publications identified which will be presented for a vote at the Annual Meeting. The Committee may also take up routine or miscellaneous items brought to its attention after the preparation of this document. The Committee may decide to accept items for discussion that are not listed in this document, providing they meet the criteria for exceptions as presented in NCWM Policy 3.1.4. Handbooks, *Procedures to Modify Handbooks*. The Committee has not determined whether the items presented will be Voting or Informational in nature; these determinations will result from their deliberations at the Interim Meeting.

An "Item under Consideration" is a statement of proposal and not necessarily a recommendation of the Committee. Suggested revisions are shown in **bold face print** by **~~striking out~~** information to be deleted and **<u>underlining</u>** information to be added. Requirements that are proposed to be nonretroactive are printed in ***bold faced italics***.

In some cases, there may be proposed changes affecting multiple model laws or regulations that share the same purpose or proposed changes to one model law or regulation may be dependent on the adoption of proposed changes to another. The Committee may group such items into "Blocks" to facilitate efficient handling for open hearings and voting. These blocks are identified in Committee's agenda.

All sessions are open to registered attendees of the conference. If the Committee must discuss any issue that involves proprietary information or other confidential material; that portion of the session dealing with the special issue may be closed if (1) the Chairman or, in his absence, the Chairman-Elect approves; (2) the Executive Director is notified; and (3) an announcement of the closed meeting is posted on or near the door to the meeting session and at the registration desk. If possible, the posting will be done at least a day prior to the planned closed session.

Note: It is policy to use metric units of measurement in publications; however, recommendations received by NCWM technical committees and regional weights and measures associations have been printed in this publication as submitted. Therefore, the report may contain references to inch-pound units.

Subject Series List

Table A
Table of Contents

Appendices

Table B
Glossary of Acronyms and Terms

Acronym	Term	Acronym	Term
ASTM	ASTM International	NIST	National Institute of Standards and Technology
CFR	Code of Federal Regulations	OWM	Office of Weights and Measures
CNG	Compressed Natural Gas	PALS	Packaging and Labeling Subcommittee
CWMA	Central Weights and Measures Association	S&T	Specifications and Tolerances
FALS	Fuels and Lubricants Subcommittee	SWMA	Southern Weights and Measures
L&R	Laws and Regulations	UPLR	Uniform Packaging and Labeling Regulation
LNG	Liquefied Natural Gas	USNWG	U.S. National Work Group
NCWM	National Conference on Weights and Measures	WWMA	Western Weights and Measures Association
NEWMA	Northeastern Weights and Measures Association		

Details of All Items
(In order by Reference Key)

ITEM BLOCK 1 (B1) PESTICIDE LABELING

Source:
NIST OWM (2018)

Purpose:
To notify the reader of an existing conflict between NIST Handbook 130, Uniform Packaging and Labeling Regulations (UPLR) and U.S. Environmental Protection Agency (EPA) regulations within 40 CFR 156.10(d), which supersedes state and local regulations. Products subject to the EPA control are not covered by the Fair Packaging and Labeling Act (FPLA) and as a result EPA regulations related to labeling and net quantity often differ from those of the Federal Trade Commission (FTC) and the Food and Drug Administration (FDA) under Fair Packaging and Labeling Act (FPLA).

B1: PAL-1 Sections 6.12. Supplementary Quantity Declarations, 6.14. Qualification of Declaration Prohibited, 12. Variations to be allowed.

Item under Consideration:
Amend NIST Handbook 130 Uniform Regulation for the Uniform Packaging and Labeling Regulation as follows:

NOTE X: Packages of pesticides subject to the labeling regulations of the Environmental Protection Agency under 40 CFR 156.10.d. are permitted to display the term "minimum" in conjunction with the net quantity of contents declaration. The packer may choose to fill the packages under the minimum or average systems of fill. However, if the minimum system is declared, variations above minimum quantity is permissible only to the extent that it represents deviation unavoidable in good manufacturing practice and no variation below the stated minimum quantity is permitted.

6.12. Supplementary Quantity Declarations. – The required quantity declaration may be supplemented by one or more declarations of weight, measure, or count, such declaration appearing other than on a principal display panel. Such supplemental statement of quantity of contents shall not include any term qualifying a unit of weight, measure, or count that tends to exaggerate the amount of commodity contained in the package (e.g., "giant quart, "larger" liter, "full" gallon, "when packed," "minimum, **(NOTE X, page X)**" or words of similar import).

6.14. Qualification of Declaration Prohibited. –In no case shall any declaration of quantity be qualified by the addition of the words "when packed," "minimum**,** ***(NOTE X*, page X)**", or "not less than or any words of similar import (e.g., "approximately"), nor shall any unit of weight, measure, or count be qualified by any term (such as "jumbo "giant," "full," or the like) that tends to exaggerate the amount of commodity.

Section 12. Variations to be Allowed

12.1. Packaging Variations. ***(NOTE X*, page X)**

12.1.1. Variations from Declared Net Quantity – Variations from the declared net weight, measure, or count shall be permitted when caused by unavoidable deviations in weighing, measuring, or counting the contents of individual packages that occur in current good manufacturing practice, but such variations shall not be permitted to such extent that the average of the quantities in the packages of a particular commodity or a lot of the commodity that is kept, offered, or exposed for sale, or sold is below the quantity stated, and no unreasonable shortage in any package shall be permitted even though overages in other packages in the same shipment, delivery, or lot compensate for such shortage. Variations above the declared quantity shall not be unreasonably large.

12.1.2. Variations Resulting from Exposure. – Variations from the declared weight or measure shall be permitted when caused by ordinary and customary exposure to conditions that normally occur in good distribution practice and that unavoidably result in change of weight or measure, but only after the commodity is introduced into intrastate commerce, provided the phrase "introduced into intrastate commerce" as used in this paragraph shall be construed to define the time and the place at which the first sale and delivery of a package is made within the state, the delivery being either:

(a) directly to the purchaser or to his/her agent; or

(b) to a common carrier for shipment to the purchaser,

and this paragraph shall be construed as requiring that so long as a shipment, delivery, or lot of packages of a particular commodity remains in the possession or under the control of the packager or the person who introduces the package into intrastate commerce, exposure variations shall not be permitted.

12.2. Magnitude of Permitted Variations. ***(NOTE X,* page X)** – The magnitude of package variations of this regulation permitted under Sections 12. Variations to be Allowed, 12.1. Package Variations, 12.1.1. Variations from Declared Net Quantity, and 12.1.2. Variations Resulting from Exposure shall be those expressly set forth in this regulation and variations such as those contained in the procedures and tables of the latest version of NIST Handbook 133, "Checking the Net Contents of Packaged Goods."

B1: NET-1 Sections 1.2.2. Average Requirement, 1.4. Other Regulatory Agencies Responsible for Package Regulations and Applicable Requirements, 2.3.7.2. Average Requirement, and Appendix A. Tables – Table 1-1 "Agencies Responsible for Package Regulations and Applicable Requirements

Item under Consideration:
Amend the Handbook 133 as follows:

Add a note to section **1.2.2. Average Requirement:**

(See also Section 1.4.1. Special Net Quantity of Contents Requirements for Pesticides Labeled with a "Minimum" Net Quantity of Contents Declarations.)

Add a new sub-section under section **1.4. "Other Regulatory Agencies Responsible for Package Regulations and Applicable Requirements.":**

1.4.1. Net Quantity of Contents Requirements for Pesticides Labeled with Minimum Net Quantity of Contents Declarations.

The Environmental Protection Agency (EPA) permits packers of pesticides the option of declaring the net quantity of contents using either the average or the minimum package fill systems. If the manufacturer uses the minimum system, the term "minimum" must appear adjacent to the quantity declaration. If the packer uses the average system, the procedures in Section 2.3.7. Evaluate for Compliance are used to determine compliance. Use the procedures in 2.3. "Basic Test Procedure for Gravimetric Testing of Net Weight" to select and test a sample and use the following compliance procedure to determine if the sample passes or fails the minimum package fill requirements.

Compliance Requirements for Packaged Pesticides (e.g., antimicrobial wipes, insect repellent wipes, and towelettes)

1. **The net weight or measure of quantity shall be exclusive of wrappers or other materials and shall be the average quantity unless there is an explicit statement on the Principal Display Panel**

(PDP) in conjunction with the quantity declaration that the package was filled under the minimum system of fill [e.g., "minimum weight 500 g (1 lb 1 oz).]

2. **A Maximum Allowable Variation (MAV) is not applied.**
3. **Variation above minimum content is permissible only to the extent that it represents deviation unavoidable in good manufacturing practice.**
4. **Variation below the declared minimum quantity is NOT permitted.**
5. **Compliance Procedure and Requirements**
   a. **After the samples are tested the individual package errors are determined. The average error is not calculated.**
   b. **Review the individual package errors:**
      i. **If a minus package error is found the sample fails.**
      ii. **If no minus package errors are found the sample passes (e.g., the errors are 0 or plus)**

Add a note to **2.3.7.2. Average Requirement –**

(Refer to Section 1.4.1. Special Net Quantity of Contents Compliance Requirements for Pesticides Labeled with a "Minimum" Net Quantity of Contents Declarations.)

Add the following note to the Responsibility Agency "EPA" **Table 1-1 "Agencies Responsible for Package Regulations and Applicable Requirements."**:

(Refer to Section 1.4.1. Special Net Quantity of Contents Compliance Requirements for Pesticides Labeled with a "Minimum" Net Quantity of Contents Declarations.)

Background/Discussion: See Appendix A, Page S&T-A5.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

ITEM BLOCK 2 (B2) KEROSENE, LPG, AND FUELS, LUBRICANTS AND AUTOMOTIVE PRODUCTS, CNG, LNG AND DEF

Source:
Archer Daniels Midland Corporation (2018)

B2: MOS-1 Section 2. 9. Kerosene (Kerosine).

Purpose:
This proposal is to harmonize the method of sale for kerosene between the Uniform Regulation for the Method of Sale of Commodities and the Uniform Engine Fuels and Automotive Lubricants Regulation.

Item under Consideration:
Amend NIST Handbook 130, Uniform Method of Sale of Commodities Regulation as follows:

2.19. Kerosene (Kerosine). – All kerosene kept, offered, exposed for sale, or sold shall be identified as such and will include, with the word kerosene, an indication of its compliance with the latest version of the standard specification ASTM Standard D3699, "Standard Specification for Kerosine."

2.19.1. Labeling of Grade Required. – Kerosene shall be identified by the grades No. 1-K or No. 2-K.
Example:
1K Kerosene; Kerosene - 2K.
(Added 1983) **(Amended 20XX)**

2.19.2. Additional Labeling Requirements. – Each retail dispenser of kerosene shall be labeled as 1-K Kerosene or 2-K. In addition, No. 2-K dispensers shall display the following legend:
"Warning - Not Suitable For Use In Unvented Heaters Requiring No. 1-K."

The lettering of this legend shall not be less than 12.7 mm (½ in) in height by 1.5 mm (1/16 in) stroke; block style letters and the color of lettering shall be in definite contrast to the background color to which it is applied.
(Added 20XX)

~~**2.19.1.**~~ **2.19.3 Retail Sale from Bulk. –** All kerosene kept, offered, or exposed for sale and sold from bulk at retail shall be in terms of the gallon or liter.
(Added 2012)

B2: FLR-1 Section 3.7. Kerosene (Kerosine).

Purpose:
This proposal is to harmonize the method of sale for kerosene between the Uniform Regulation for the Method of Sale of Commodities and the Uniform Engine Fuels and Automotive Lubricants Regulation.

Item under Consideration:
Amend NIST Handbook 130, Uniform Engine Fuels and Automotive Lubricants Regulation as follows:

3.7. Kerosene (Kerosine).

3.7.1. Kerosene (Kerosine). – All kerosene kept, offered, exposed for sale, or sold shall be identified as such and will include, with the word kerosene, an indication of its compliance with the latest version of the standard specification ASTM Standard D3699, "Standard Specification for Kerosine."

~~**3.7.1.**~~ **3.7.2 Labeling of Grade Required.** – Kerosene shall be identified by the grades No. 1-K or No. 2-K.

Example:
1K Kerosene; Kerosene - 2K.

~~**3.7.2.**~~ **3.7.3 Additional Labeling Requirements.** – Each retail dispenser of kerosene shall be labeled as 1-K Kerosene or 2-K. In addition, No. 2-K dispensers shall display the following legend:

"Warning - Not Suitable For Use In Unvented Heaters Requiring No. 1-K."

The lettering of this legend shall not be less than 12.7 mm (½ in) in height by 1.5 mm (1/16 in) stroke; block style letters and the color of lettering shall be in definite contrast to the background color to which it is applied.

3.7.4 Retail Sale from Bulk. – All kerosene kept, offered, or exposed for sale and sold from bulk at retail shall be in terms of the gallon or liter.

B2: MOS-2 Section 2.21. Liquefied Petroleum Gas.

Purpose:
This proposal is to harmonize the method of sale for liquefied petroleum gas between the Uniform Regulation for the Method of Sale of Commodities and the Uniform Engine Fuels and Automotive Lubricants Regulation.

Item under Consideration:
Amend NIST Handbook 130, Uniform Method of Sale of Commodities Regulation as follows:

2.21. Liquefied Petroleum Gas (LPG).

2.21.1. How LPG is to be Identified. – Liquefied petroleum gases shall be identified by grades Commercial Propane, Commercial Butane, Commercial PB Mixtures or Special-Duty Propane (HD5).
(Amended 20XX)

~~2.21.~~ **2.21.2. Liquefied Petroleum Gas.** – All liquefied petroleum gas, including, but not limited to propane, butane, and mixtures thereof, shall be kept, offered, exposed for sale, or sold by the pound, metered cubic foot ***[NOTE 7***, page 125] of vapor (defined as 1 ft3 at 60 ºF [15.6 °C]), or the gallon (defined as 231 in3 at 60 ºF [15.6 °C]). All metered sales by the gallon, except those using meters with a maximum rated capacity of 20 gal/min or less, shall be accomplished by use of a meter and device that automatically compensates for temperature.
(Added 1986)

NOTE 7: *Sources: American National Standards Institute, Inc., "American National Standard for Gas Displacement Meters (500 Cubic Feet per Hour Capacity and Under)," First edition, 1974, and NIST Handbook 44, "Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices."*

2.21.3. Retail Dispenser Labeling. – Each retail dispenser of LPGs shall be labeled as "Commercial Propane," "Commercial Butane," "Commercial PB Mixtures," or "Special-Duty Propane (HD5)."
(Amended 20XX)

2.21.4. Additional Labeling Requirements. – LPG shall be labeled with its automotive fuel rating in accordance with 16 CFR Part 306.
(Amended 20XX)

2.21.5. NFPA Labeling Requirements Also Apply. (Refer to the most recent edition of NFPA 58.)
(Amended 20XX)

B2: FLR-2 Section 3.10. Liquefied Petroleum Gas.

Purpose:
This proposal is to harmonize the method of sale for liquefied petroleum gas between the Uniform Regulation for the Method of Sale of Commodities and the Uniform Engine Fuels and Automotive Lubricants Regulation.

Item under Consideration:
Amend NIST Handbook 130, Uniform Engine Fuels and Automotive Lubricants Regulation as follows:

3.10. Liquefied Petroleum Gas (LPG).

3.10.1. How LPG is to be Identified. – Liquefied petroleum gases shall be identified by grades Commercial Propane, Commercial Butane, Commercial PB Mixtures or Special-Duty Propane (HD5).

3.10.2. Liquefied Petroleum Gas. – All liquefied petroleum gas, including, but not limited to propane, butane, and mixtures thereof, shall be kept, offered, exposed for sale, or sold by the pound, metered cubic foot *[NOTE 7*, page 125] of vapor (defined as 1 ft3 at 60 ºF [15.6 °C]), or the gallon (defined as 231 in3 at 60 ºF [15.6 °C]). All metered sales by the gallon, except those using meters with a maximum rated capacity of 20 gal/min or less, shall be accomplished by use of a meter and device that automatically compensates for temperature.
(Added 1986)

NOTE 7: Sources: American National Standards Institute, Inc., "American National Standard for Gas Displacement Meters (500 Cubic Feet per Hour Capacity and Under)," First edition, 1974, and NIST Handbook 44, "Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices."

~~**3.10.2.**~~ **3.10.3. Retail Dispenser Labeling.** – Each retail dispenser of LPGs shall be labeled as "Commercial Propane," "Commercial Butane," "Commercial PB Mixtures," or "Special-Duty Propane (HD5)."

~~**3.10.3.**~~ **3.10.4. Additional Labeling Requirements.** – LPG shall be labeled with its automotive fuel rating in accordance with 16 CFR Part 306.

~~**3.10.4.**~~ **3.10.5. NFPA Labeling Requirements Also Apply.** (Refer to the most recent edition of NFPA 58.)

B2: MOS-3 Sections 2.15. Solid Fuel Products, 2.16. Compressed or Liquefied Gases in Refillable Cylinders, 2.19. Kerosene (Kerosine), 2.20. Gasoline Oxygenate Blends, 2.21. Liquefied Petroleum Gas, 2.27. Retail Sales of Natural Gas Sold as a Vehicle Fuel, 2.30. Ethanol Flex Fuel, 2.31. Biodiesel and Biodiesel Blends, 2.32. Retail Sales of Hydrogen, 2.33. Oil, 2.34. Retail Sales of Electricity Sold as a Vehicle Fuel, 2.35. Diesel Exhaust Fluid, and 2.XX. Transmission Fluid.

Purpose:
To consolidate the method of sale information for fuels, lubricants and automotive products into one regulation in Handbook 130.

Item under Consideration:
Amend NIST Handbook 130, Uniform Method of Sale of Commodities Regulation as follows:

Delete the following sections in their entirety, to be replaced with new language:

~~**2.15. Solid Fuel Products**~~
~~**2.16. Compressed or Liquefied Gases in Refillable Cylinders.**~~
~~**2.19. Kerosene (Kerosine).**~~
~~**2.20. Gasoline-Oxygenate Blends.**~~

~~**2.21. Liquefied Petroleum Gas**~~
~~**2.27. Retail Sales of Natural Gas Sold as a Vehicle Fuel.**~~
~~**2.30. Ethanol Flex Fuel.**~~
~~**2.31. Biodiesel and Biodiesel Blends.**~~
~~**2.32. Retail Sales of Hydrogen**~~
~~**2.33. Oil.**~~
~~**2.34. Retail Sales of Electricity Sold as a Vehicle Fuel.**~~
~~**2.35. Diesel Exhaust Fluid (DEF).**~~
~~**2.XX. Transmission Fluid.**~~

Replace the deleted sections with the following to be editorially renumbered and alphabetized as needed.

Section 3. Classification and Method of Sale of Fuels, Lubricants and Automotive Products

3.1. General Considerations.

3.1.1 Definitions – The definitions set forth in the current edition of NIST Handbook 130, "Uniform Engine Fuels and Automotive Lubricants Regulation" Section 1. Definitions is incorporated into this section by reference.

3.1.2. Specifications – The specifications set forth in the current edition of NIST Handbook 130, "Uniform Engine Fuels and Automotive Lubricants Regulation" Section 2. Standard Fuel Specifications is incorporated into this section by reference.

3.1.3. Documentation. – When products regulated by this rule are sold, an invoice, bill of lading, shipping paper, or other documentation must accompany each delivery other than a retail sale. This document must identify the quantity, the name of the product, the particular grade of the product, the applicable automotive fuel rating, and oxygenate type and content (if applicable), the name and address of the seller and buyer, and the date and time of the sale. Documentation must be retained at the retail establishment for a period not less than one year.

(Amended 2008)

3.1.4. Retail Dispenser Labeling. – All retail dispensing devices must identify conspicuously the type of product, the particular grade of the product, and the applicable automotive fuel rating.

3.1.5. Grade Name. – The sale of any product under any grade name that indicates to the purchaser that it is of a certain automotive fuel rating or ASTM grade shall not be permitted unless the automotive fuel rating or grade indicated in the grade name is consistent with the value and meets the requirements specification is 3.1.2. Specifications.

2.15. Solid Fuel Products. – Anthracite, semi anthracite, bituminous, semi-bituminous or lignite coal, and any other natural, manufactured, or patented fuel, not in liquid or gaseous form, except fireplace and stove wood, shall be offered, exposed for sale, or sold by net weight when in package form.

(Added 1979)

2.16. Compressed or Liquefied Gases in Refillable Cylinders.

2.16.1. Application. – This section does not apply to disposable cylinders of compressed or liquefied gases.

2.16.2. Net Contents. – The net contents shall be expressed in terms of cubic meters or cubic feet, kilograms, or pounds and ounces. See Section 2.21. Liquefied Petroleum Gas for permitted expressions of net contents for liquefied petroleum gas. A standard cubic foot of gas is defined as a

cubic foot at a temperature of 21 ºC (70 ºF) and a pressure of 101.35 kilopascals (14.696 psia), except for liquefied petroleum gas as stated in Section 2.21.

2.16.3. Cylinder Labeling. – Whenever cylinders are used for the sale of compressed or liquefied gases by weight, or are filled by weight and converted to volume, the following shall apply:

2.16.3.1. Tare weights.

(a) Stamped or Stenciled Tare Weight. – For safety purposes, the tare weight shall be legibly and permanently stamped or stenciled on the cylinder. All tare weight values shall be preceded by the letters "TW" or the words "tare weight." The tare weight shall include the weight of the cylinder (including paint), valve, and other permanent attachments. The weight of a protective cap shall not be included in tare or gross weights. The Code of Federal Regulations Title 49, Section 178.50-22 requires the maker of cylinders to retain test reports verifying the cylinder tare weight accuracy to a tolerance of 1 %.

(b) Tare Weight for Purposes of Determining the Net Contents. – The tare weight used in the determination of the final net contents may be either:

(1) the stamped or stenciled tare weight; or

(2) the actual tare determined at the time of filling the cylinder. If the actual tare is determined at the time of filling the cylinder, it must be legibly marked on the cylinder or on a tag attached to the cylinder at the time of filling.

(c) Allowable difference. – If the stamped or stenciled tare is used to determine the net contents of the cylinder, the allowable difference between the actual tare weight and the stamped (or stenciled) tare weight, or the tare weight on a tag attached to the cylinder for a new or used cylinder, shall be:

(1) ½ % for tare weights of 9 kg (20 lb) or less; or

(2) ¼ % for tare weights of more than 9 kg (20 lb).

(d) Average requirement. – When used to determine the net contents of cylinders, the stamped or stenciled tare weights of cylinders at a single place of business found to be in error predominantly in a direction favorable to the seller and near the allowable difference shall be considered to be not in conformance with these requirements.

2.16.3.2. Acetylene Gas Cylinder Tare Weights. – Acetone in the cylinder shall be included as part of the tare weight.

2.16.3.3. Acetylene Gas Cylinder Volumes. – The volumes of acetylene shall be determined from the product weight using approved tables such as those published in NIST Handbook 133 or those developed using 70 ºF (21 ºC) and 14.7 ft^3 (101.35 kPa) per pound at 1 atmosphere as conversion factors.

2.16.3.4. Compressed Gases such as Oxygen, Argon, Nitrogen, Helium, and Hydrogen. – The volumes of compressed gases such as oxygen, argon, nitrogen, helium, or hydrogen shall be determined using the tables and procedures given in NIST Technical Note 1079, Tables of Industrial Gas Container Contents and Density for Oxygen, Argon, Nitrogen, Helium, and Hydrogen and supplemented by additional procedures and tables in NIST Handbook 133.

(Added 1981) (Amended 1990)

2.19. Kerosene (Kerosine – All kerosene kept, offered, exposed for sale, or sold shall be identified as such and will include, with the word kerosene, an indication of its compliance with the latest version of the standard specification ASTM Standard D3699, "Standard Specification for Kerosine."

Example:

1K Kerosene; Kerosene - 2K.

(Added 1983)

2.19.1. Retail Sale from Bulk. – All kerosene kept, offered, or exposed for sale and sold from bulk at retail shall be in terms of the gallon or liter.

(Added 2012)

2.21. Liquefied Petroleum Gas. – All liquefied petroleum gas, including, but not limited to propane, butane, and mixtures thereof, shall be kept, offered, exposed for sale, or sold by the pound, metered cubic foot *[NOTE 7,* page 125] of vapor (defined as 1 ft^3 at 60 ºF [15.6 °C]), or the gallon (defined as 231 in^3 at 60 ºF [15.6 °C]). All metered sales by the gallon, except those using meters with a maximum rated capacity of 20 gal/min or less, shall be accomplished by use of a meter and device that automatically compensates for temperature.

(Added 1986)

NOTE 7: Sources: American National Standards Institute, Inc., "American National Standard for Gas Displacement Meters (500 Cubic Feet per Hour Capacity and Under)," First edition, 1974, and NIST Handbook 44, "Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices."

2.27. Retail Sales of Natural Gas Sold as a Vehicle Fuel.

2.27.1. Definitions.

2.27.1.1. Compressed Natural Gas (CNG). – A gaseous fuel composed primarily of methane that is suitable for compression and dispensing into a fuel storage container(s) for use as an engine fuel.

(Amended 2016)

2.27.1.2. Gasoline Gallon Equivalent (GGE). – Gasoline gallon equivalent (GGE) means 2.567 kg (5.660 lb) of compressed natural gas.

(Amended 2016)

2.27.1.3. Diesel Gallon Equivalent (DGE). – Diesel gallon equivalent means 6.384 lb of compressed natural gas or 6.059 lb of liquefied natural gas.

(Added 2016)

2.27.1.4. Liquefied Natural Gas (LNG). – Natural gas, which is predominantly methane, that has been liquefied at – 162 °C (− 260 °F) at 14.696 psia and stored in insulated cryogenic fuel storage tanks for use as an engine fuel.

(Added 2016)

2.27.2. Method of Retail Sale and Dispenser Labeling.

2.27.2.1. Method of Retail Sale for Compressed Natural Gas. – All compressed natural gas kept, offered, or exposed for sale and sold at retail as a vehicle fuel shall be measured in terms of mass, and indicted in the gasoline gallon equivalent (GGE), diesel gallon equivalent (DGE) units, or mass.

(Amended 2016)

2.27.2.2. Dispenser Labeling Compressed Natural Gas. – All retail compressed natural gas dispensers shall be labeled with the equivalent conversion factor in terms of pounds (lb). The label shall be permanently and conspicuously displayed on the face of the dispenser and shall have the statement "1 Gasoline Gallon Equivalent (GGE) means 5.660 lb of Compressed Natural Gas" or "1 Diesel Gallon Equivalent (DGE) means 6.384 lb of Compressed Natural Gas" consistent with the method of sale used.

(Amended 2016)

2.27.2.3. Method of Retail Sale for Liquefied Natural Gas. – All liquefied natural gas kept, offered, or exposed for sale and sold at retail as a vehicle fuel shall be measured in mass and indicated in diesel gallon equivalent (DGE) units or mass.

(Added 2016)

2.27.2.4. Dispenser Labeling of Retail Liquefied Natural Gas. – All retail liquefied natural gas dispensers shall be labeled with the equivalent conversion factor in terms of pounds (lb). The label shall be permanently and conspicuously displayed on the face of the dispenser and shall have the statement "1 Diesel Gallon Equivalent (DGE) means 6.059 lb of Liquefied Natural Gas."

(Added 2016)

2.32. Retail Sales of Hydrogen

2.32.1. Definitions for Hydrogen Fuel. – A fuel composed of molecular hydrogen intended for consumption in a surface vehicle or electricity production device with an internal combustion engine or fuel cell.

(Amended 2012)

2.32.2. Method of Retail Sale and Dispenser Labeling. – All hydrogen fuel kept, offered, or exposed for sale and sold at retail shall be in mass units in terms of the kilogram. The symbol for hydrogen vehicle fuel shall be the capital letter "H" (the word Hydrogen may also be used).

2.32.3. Retail Dispenser Labeling.

- **(a) A computing dispenser must display the unit price in whole cents on the basis of price per kilogram.**
- **(b) The service pressure(s) of the dispenser must be conspicuously shown on the user interface in bar or the SI unit of pascal (Pa) (e.g., MPa).**
- **(c) The product identity must be shown in a conspicuous location on the dispenser.**
- **(d) National Fire Protection Association (NFPA) labeling requirements also apply.**
- **(e) Hydrogen shall be labeled in accordance with 16 CFR 309 – FTC Labeling Alternative Fuels.**

2.32.4. Street Sign Prices and Advertisements.

- **(a) The unit price must be in terms of price per kilogram in whole cents (e.g., $3.49 per kg, not $3.499 per kg.**
- **(b) The sign or advertisement must include the service pressure (expressed in megapascals) at which the dispenser(s) delivers hydrogen fuel (e.g., H35 or H70).**

(Added 2010)

2.33. Oil.

2.33.1. Labeling of Vehicle Engine (Motor) Oil. – Vehicle engine (motor) oil shall be labeled.

2.33.1.1. Viscosity. The label on any vehicle engine (motor) oil container, receptacle, dispenser, or storage tank, and any invoice or receipt from service on an engine that includes the installation of vehicle engine (motor) oil dispensed from a receptacle, dispenser, or storage tank, shall contain the viscosity grade classification preceded by the letters "SAE" in accordance with SAE International's latest version of SAE J300, "Engine Oil Viscosity Classification."

NOTE: If an invoice or receipt from service on an engine has limited room for identifying the viscosity, brand, and service category, then abbreviated versions of each may be used on the invoice or receipt and the letters "SAE" may be omitted from the viscosity classification.

(Note added 2014)

(Amended 2014)

2.33.1.2. Brand. –The label on any vehicle engine (motor) oil container and the invoice or receipt from service on an engine that includes the installation of bulk vehicle engine (motor) oil dispensed from a receptacle, dispenser, or storage tank shall contain the name, brand, trademark, or trade name of the vehicle engine (motor) oil.

(Amended 2014)

2.33.1.3. Engine Service Category. –The label on any vehicle engine (motor) oil container, receptacle, dispenser, or storage tank and the invoice or receipt from service on an engine that includes the installation of bulk vehicle engine (motor) oil dispensed from a receptacle, dispenser, or storage tank shall contain the engine service category, or categories, displayed in letters not less than 3.18 mm ($^1/_8$ in) in height, as defined by the latest version of SAE J183, "Engine Oil Performance and Engine Service Classification (Other than "Energy Conserving")," API Publication 1509, "Engine Oil Licensing and Certification System," European Automobile Manufacturers Association (ACEA), "European Oil Sequences," or other Vehicle or Engine Manufacturer standards as approved in Section 2.33.1.3.1. Vehicle or Engine Manufacturer Standard.

(Amended 2014)

2.33.1.3.1. Vehicle or Engine Manufacturer Standard. –The label on any vehicle engine (motor) oil container, receptacle, dispenser, or storage tank and the invoice or receipt from service on an engine that includes the installation of vehicle engine (motor) oil dispensed from a receptacle, dispenser, or storage tank shall identify the specific vehicle or engine manufacturer standard, or standards, met in letters not less than 3.18 mm ($^1/_8$ in) in height. If the vehicle (motor) oil only meets a vehicle or engine manufacturer standard, the label must clearly identify that the oil is only intended for use where specifically recommended by the vehicle or engine manufacturer.

(Added 2014)

2.33.1.3.2. Inactive or Obsolete Service Categories. –The label on any vehicle engine (motor) oil container, receptacle, dispenser, or storage tank and the invoice or receipt from service on an engine that includes the installation of bulk vehicle engine (motor) oil dispensed from a receptacle, dispenser, or storage tank shall bear a plainly visible cautionary statement in compliance with the latest version of SAE J183, Appendix A, whenever the vehicle engine (motor) oil in the container or in bulk does not meet an active API service category as defined by the latest version of SAE J183, "Engine Oil Performance and Engine Service

Classification (Other than "Energy Conserving")." If a vehicle engine (motor) oil is identified as only meeting a vehicle or engine manufacturer standard, the labeling requirements in Section 2.33.1.3.1. Vehicle or Engine Manufacturer Standard applies.

(Amended 2014)

2.33.1.4. Tank Trucks or Rail Cars. –Tank trucks, rail cars, and other types of delivery trucks that are used to deliver bulk vehicle engine (motor) oil are not required to display the SAE viscosity grade and service category or categories on such tank trucks, rail cars, and other types of delivery trucks.

(Amended 2013 and 2014)

2.33.1.5. Documentation. –When the engine (motor) oil is sold in bulk, an invoice, bill of lading, shipping paper, or other documentation must accompany each delivery. This document must identify the quantity of bulk engine (motor) oil delivered as defined in Sections 2.33.1.1. Viscosity; 2.33.1.2. Brand; 2.33.1.3. Engine Service Category; the name and address of the seller and buyer; and the date and time of the sale. For inactive or obsolete service categories, the documentation shall also bear a plainly visible cautionary statement as required in Section 2.33.1.3.2. Inactive or Obsolete Service Categories. Documentation must be retained at the retail establishment for a period of not less than one year.

(Added 2013) (Amended 2014)

(Added 2012) (Amended 2013 and 2014)

2.34. Retail Sales of Electricity Sold as a Vehicle Fuel.

2.34.1. Definitions.

2.34.1.1. Electricity Sold as Vehicle Fuel. –Electrical energy transferred to and/or stored onboard an electric vehicle primarily for the purpose of propulsion.

2.34.1.2. Electric Vehicle Supply Equipment (EVSE). The conductors, including the ungrounded, grounded, and equipment grounding conductors; the electric vehicle connectors; attachment plugs; and all other fittings, devices, power outlets, or apparatuses installed specifically for the purpose of measuring, delivering, and computing the price of electrical energy delivered to the electric vehicle.

2.34.1.3. Fixed Service. –Service that continuously provides the nominal power that is possible with the equipment as it is installed.

2.34.1.4. Variable Service. –Service that may be controlled resulting in periods of reduced, and/or interrupted transfer of electrical energy.

2.34.1.5. Nominal Power. –Refers to the "intended" or "named" or "stated" as opposed to "actual" rate of transfer of electrical energy (i.e., power).

2.34.2. Method of Sale. – All electrical energy kept, offered, or exposed for sale and sold at retail as a vehicle fuel shall be in units in terms of the megajoule (MJ) or kilowatt-hour (kWh). In addition to the fee assessed for the quantity of electrical energy sold, fees may be assessed for other services; such fees may be based on time measurement and/or a fixed fee.

2.34.3. Retail Electric Vehicle Supply Equipment (EVSE) Labeling.

(a) A computing EVSE shall display the unit price in whole cents (e.g., $0.12) or tenths of one cent (e.g., $0.119) on the basis of price per megajoule (MJ) or kilowatt-hour (kWh). In cases where the electrical energy is unlimited or free of charge, this fact shall be clearly indicated in place of the unit price.

(b) For fixed service applications, the following information shall be conspicuously displayed or posted on the face of the device:

(1) the level of EV service expressed as the nominal power transfer (i.e., nominal rate of electrical energy transfer), and

(2) the type of electrical energy transfer (e.g., AC, DC, wireless).

(c) For variable service applications, the following information shall be conspicuously displayed or posted on the face of the device:

(1) the type of delivery (i.e., variable);

(2) the minimum and maximum power transfer that can occur during a transaction, including whether service can be reduced to zero;

(3) the condition under which variations in electrical energy transfer will occur; and

(4) the type of electrical energy transfer (e.g., AC, DC, wireless).

(d) Where fees will be assessed for other services in direct connection with the fueling of the vehicle, such as fees based on time measurement and/or a fixed fee, the additional fees shall be displayed.

(e) The EVSE shall be labeled in accordance with 16 CFR, Part 309 – FTC Labeling Requirements for Alternative Fuels and Alternative Fueled Vehicles.

(f) The EVSE shall be listed and labeled in accordance with the National Electric Code® (NEC) NFPA 70, Article 625 Electric Vehicle Charging Systems (www.nfpa.org).

2.34.4. Street Sign Prices and Other Advertisements. – Where electrical energy unit price information is presented on street signs or in advertising other than on EVSE:

(a) The electrical energy unit price shall be in terms of price per megajoule (MJ) or kilowatt-hour (kWh) in whole cents (e.g., $0.12) or tenths of one cent (e.g., $0.119). In cases where the electrical energy is unlimited or free of charge, this fact shall be clearly indicated in place of the unit price.

(b) In cases where more than one electrical energy unit price may apply over the duration of a single transaction to sales to the general public, the terms and conditions that will determine each unit price and when each unit price will apply shall be clearly displayed.

(c) For fixed service applications, the following information shall be conspicuously displayed or posted:

(1) the level of EV service expressed as the nominal power transfer (i.e., nominal rate of electrical energy transfer), and

(2) the type of electrical energy transfer (e.g., AC, DC, wireless).

(d) For variable service applications, the following information shall be conspicuously displayed or posted:

(1) the type of delivery (i.e., variable);

(2) the minimum and maximum power transfer that can occur during a transaction, including whether service can be reduced to zero;

(3) the conditions under which variations in electrical energy transfer will occur; and

(4) the type of electrical energy transfer (e.g., AC, DC, wireless).

Where fees will be assessed for other services in direct connection with the fueling of the vehicle, such as fees based on time measurement and/or a fixed fee, the additional fees shall be included on all street signs or other advertising.

(Added 2013)

3.2. Automotive Gasoline and Automotive Gasoline-Oxygenate Blends.

3.2.1. Posting of Antiknock Index Required – All automotive gasoline and automotive gasoline-oxygenate blends shall post the antiknock index in accordance with applicable regulations, 16 CFR Part 306 issued pursuant to the Petroleum Marketing Practices Act, as amended.

3.2.2. When the Term "Leaded" May be Used. –The term "leaded" shall be used only when the fuel meets specification requirements of paragraph 2.1.5. Minimum Lead Content to be Termed "Leaded."

3.2.3. Use of Lead Substitute Must be Disclosed. –Each dispensing device from which gasoline or gasoline-oxygenate blends containing a lead substitute is dispensed shall display the following legend: "Contains Lead Substitute." The lettering of this legend shall not be less than 12.7 mm (½ in) in height and the color of the lettering shall be in definite contrast to the background color to which it is applied.

3.2.4. Nozzle Requirements for Leaded Fuel. –Each dispensing device from which gasoline or gasoline-oxygenate blends that contain lead in amounts sufficient to be considered "leaded" gasoline, or lead substitute engine fuel, is sold shall be equipped with a nozzle spout having a terminal end with an outside diameter of not less than 23.63 mm (0.930 in).

3.2.5. Prohibition of Terms – It is prohibited to use specific terms to describe a grade of gasoline or gasoline-oxygenate blend unless it meets the minimum antiknock index requirement shown in Table 1. Minimum Antiknock Index Requirements.

Table 1. Minimum Antiknock Index Requirements		
Term	Minimum Antiknock Index	
	ASTM D4814 Altitude Reduction Areas IV and V	All Other ASTM D4814 Areas
Premium, Super, Supreme, High Test	90	91
Midgrade, Plus	87	89
Regular Leaded	86	88
Regular, Unleaded (alone)	85	87
Economy	--	86

(Table 1. Amended 1997)

3.2.6. Method of Retail Sale. – Type of Oxygenate must be disclosed. All automotive gasoline or automotive gasoline-oxygenate blends kept, offered, or exposed for sale, or sold at retail containing at least 1.5 mass percent oxygen shall be identified as "with" or "containing" (or similar wording) the predominant oxygenate in the engine fuel. For example, the label may read "contains ethanol" or "with methyl *tertiary*-butyl ether (MTBE)." The oxygenate contributing the largest mass percent oxygen to the blend shall be considered the predominant oxygenate. Where mixtures of only ethers are present, the retailer may post the predominant oxygenate followed by the phrase "or other ethers" or alternatively post the phrase "contains MTBE or other ethers." In addition, gasoline-methanol blend fuels containing more than 0.15 mass percent oxygen from methanol shall be identified as "with" or "containing" methanol. This information shall be posted on the upper 50 % of the dispenser front panel in a position clear and conspicuous from the driver's position in a type at least 12.7 mm (½ in) in height, 1.5 mm (1/16 in) stroke (width of type).

(Amended 1996)

3.2.7. Documentation for Dispenser Labeling Purposes – The retailer shall be provided, at the time of delivery of the fuel, on product transfer documents such as an invoice, bill of lading, shipping paper, or other documentation:

(a) Information that compiles with 40 CFR § 80.1503 when the fuel contains ethanol.

(Added 2014)

For fuels that do not contain ethanol, information that complies with 40 CFR § 80.1503 and a declaration of the predominant oxygenate or combination of oxygenates present in concentrations sufficient to yield an oxygen content of at least 1.5 mass percent in the fuel. Where mixtures of only ethers are present, the fuel supplier may identify either the predominant oxygenate in the fuel (i.e., the oxygenate contributing the largest mass percent oxygen) or alternatively, use the phrase "contains MTBE or other ethers."

(Added 2014)

Gasoline containing more than 0.15 mass percent oxygen from methanol shall be identified as "with" or "containing" methanol.

(Added 2014)

(Amended 1996 and 2014)

3.2.8. EPA Labeling Requirements Also Apply. –Retailers and wholesale purchaser-consumers of gasoline shall comply with the EPA pump labeling requirements for gasoline containing greater than 10 volume percent (v%) up to 15 volume percent (v%) ethanol (E15) under 40 CFR § 80.1501.

(Added 2012)

3.3. Diesel Fuel.

3.3.1. Labeling of Grade Required – Diesel Fuel shall be identified by grades No. 1-D, No. 2-D, or No. 4-D.

3.3.2. EPA Labeling Requirements Also Apply. –Retailers and wholesale purchaser-consumers of diesel fuel shall comply with EPA pump labeling requirements for sulfur under 40 CFR § 80.570.

3.3.3. Delivery Documentation for Premium Diesel. –Before or at the time of delivery of premium diesel fuel, the retailer or the wholesale purchaser-consumer shall be provided on an invoice, bill of lading, shipping paper, or other documentation a declaration of all performance properties that qualifies the fuel as premium diesel fuel as required in Section 2.2.1. Premium Diesel Fuel.

(Added 1998) (Amended 1999)

3.3.4. Nozzle Requirements for Diesel Fuel. – Each dispensing device from which diesel fuel is sold at retail shall be equipped with a nozzle spout with a diameter that conforms to the latest version of SAE J285, "Dispenser Nozzle Spouts for Liquid Fuels Intended for Use with Spark Ignition and Compression Ignition Engines." (Enforceable effective July 1, 2013)

(Added 2012)

(Amended 1998, 1999, 2008, and 2012)

3.4. Aviation Turbine Fuels

3.4.1. Labeling of Grade Required. – Aviation turbine fuels shall be identified by Jet A, Jet A 1, or Jet B.

3.4.2. NFPA Labeling Requirements Also Apply. – Each dispenser or airport fuel truck dispensing aviation turbine fuels shall be labeled in accordance with the most recent edition of National Fire Protection Association (NFPA 407, Standard for Aircraft Fuel Servicing.

NOTE: For example, NFPA 407, 2007 edition: Section 4.3.18 Product Identification Signs. Each aircraft fuel servicing vehicle shall have a sign on each side and the rear to indicate the product. The sign shall have letters at least 75 mm (3 in) high of color sharply contrasting with its background for visibility. It shall show the word "FLAMMABLE" and the name of the product carried, such as "JET A," "JET B," "GASOLINE," or "AVGAS." (NOTE: Refer to the most recent edition NFPA 407.)

3.5. Aviation Gasoline

3.5.1. Labeling of Grade Required. – Aviation gasoline shall be identified by Grade 80, Grade 91, Grade 100, or Grade 100LL, or Grade 82UL

(Amended 2008)

3.5.2. NFPA Labeling Requirements Also Apply. –Each dispenser or airport fuel truck dispensing aviation gasoline shall be labeled in accordance with the most recent edition of National Fire Protection Association (NFPA) 407, Standard for Aircraft Fuel Servicing.

NOTE: For example, NFPA 407, 2007 edition: Section 4.3.18 Product Identification Signs. Each aircraft fuel servicing vehicle shall have a sign on each side and the rear to indicate the product. The sign shall have letters at least 3 in (75 mm) high of color sharply contrasting with its background for visibility. It shall show the word "FLAMMABLE" and the name of the product carried, such as "JET A," "JET B," "GASOLINE," or "AVGAS." (NOTE: Refer to the most recent edition NFPA 407.)

3.6. Fuel Oils.

3.6.1. Labeling of Grade Required. –Fuel Oil shall be identified by the grades of No. 1 S500, No. 1 S5000, No. 2 S500, No. 2 S5000, No. 4 (Light), No. 4, No. 5 (Light), No. 5 (Heavy), or No. 6.

(Amended 2008)

3.7. Kerosene (Kerosine

3.7.1. Labeling of Grade Required. – Kerosene shall be identified by the grades No. 1-K or No. 2-K.

3.7.2. Additional Labeling Requirements – Each retail dispenser of kerosene shall be labeled as 1-K Kerosene or 2-K. In addition, No. 2-K dispensers shall display the following legend:

"Warning - Not Suitable For Use In Unvented Heaters Requiring No. 1-K."

The lettering of this legend shall not be less than 12.7 mm (½ in) in height by 1.5 mm (1/16 in) stroke; block style letters and the color of lettering shall be in definite contrast to the background color to which it is applied.

3.8. Ethanol Flex Fuel

3.8.1. How to Identify Ethanol Flex Fuel. – Ethanol flex fuel shall be identified as Ethanol Flex Fuel or EXX Flex Fuel.

3.8.2. Labeling Requirements.

(a) Ethanol flex fuel with an ethanol concentration no less than 51 and no greater than 83 volume percent shall be labeled "Ethanol Flex Fuel, minimum 51 % ethanol

(b) Ethanol flex fuel with an ethanol concentration less than or equal to 50 volume percent shall be labeled "EXX Flex Fuel, minimum YY % ethanol," where the XX is the ethanol concentration in volume percent and YY is XX minus five (− 5). The actual ethanol concentration of the fuel shall be XX volume percent plus or minus five (± 5) volume percent.
(Added 2014)

(c) A label shall be posted which states "For Use in Flexible Fuel Vehicles (FFV) Only." This information shall be clearly and conspicuously posted on the upper 50 % of the dispenser front panel in a type at least 12.7 mm (½ in) in height, 1.5 mm (1/16 in) stroke (width of type). A label shall be posted which states, "CHECK OWNER'S MANUAL," and shall not be less than 6 mm (¼ in) in height by 0.8 mm (1/32 in) stroke; block style letters and the color shall be in definite contrast to the background color to which it is applied.

(Amended 2007, 2008, and 2014)

3.9. M85 Fuel Methanol.

3.9.1. How to Identify M85 Fuel Methanol. – Fuel methanol shall be identified as M85.

Example:

M85

3.9.2. Retail Dispenser Labeling.

(a) Fuel methanol shall be labeled with its automotive fuel rating in accordance with 16 CFR Part 306.

Example:

M85 Methanol

(b) A label shall be posted which states "For Use in Vehicles Capable of Using M85 Only." This information shall be clearly and conspicuously posted on the upper 50 % of the dispenser front panel in a type of at least 12.7 mm (½ in) in height, 1.5 mm (1/16 in) stroke (width of type).

(Amended 2008)

3.10. Liquefied Petroleum Gas (LPG).

3.10.1. How LPG is to be Identified. –Liquefied petroleum gases shall be identified by grades Commercial Propane, Commercial Butane, Commercial PB Mixtures or Special-Duty Propane (HD5).

3.10.2. Retail Dispenser Labeling. – Each retail dispenser of LPGs shall be labeled as "Commercial Propane," "Commercial Butane," "Commercial PB Mixtures," or "Special-Duty Propane (HD5)."

3.10.3. Additional Labeling Requirements. – LPG shall be labeled with its automotive fuel rating in accordance with 16 CFR Part 306.

3.10.4. NFPA Labeling Requirements Also Apply. (Refer to the most recent edition of NFPA 58.)

3.11. Compressed Natural Gas (CNG).

3.11.1. How Compressed Natural Gas is to be Identified. – For the purposes of this regulation, compressed natural gas shall be identified by the term "Compressed Natural Gas" or "CNG."

3.11.2. Retail Sales of Compressed Natural Gas Sold as a Vehicle Fuel.

3.11.2.1. Retail Dispenser Labeling.

3.11.2.1.1. Identification of Product. –Each retail dispenser of CNG shall be labeled as "Compressed Natural Gas."

3.11.2.1.2. Pressure. – CNG is dispensed into vehicle fuel containers with working pressures of 20 684 kPa (3000 psi), or 24 821 kPa (3600 psi). The dispenser shall be labeled 20 684 kPa (3000 psi), or 24 821 kPa (3600 psi) corresponding to the pressure of the CNG dispensed by each fueling hose.

(Amended 2016)

3.11.2.1.3. NFPA Labeling. – NFPA Labeling requirements also apply. (Refer to NFPA 52.)

3.11.3. Nozzle Requirements for CNG. – CNG fueling nozzles shall comply with ANSI/AGA/CGA NGV 1.

3.12. Liquefied Natural Gas (LNG).

3.12.1. How Liquefied Natural Gas is to be Identified. For the purposes of this regulation, liquefied natural gas shall be identified by the term "Liquefied Natural Gas" or "LNG."

3.12.2. Labeling of Retail Dispensers of Liquefied Natural Gas Sold as a Vehicle Fuel.

3.12.2.1. Identification of Product. –Each retail dispenser of LNG shall be labeled as "Liquefied Natural Gas."

3.12.2.2. Automotive Fuel Rating. – LNG automotive fuel shall be labeled with its automotive fuel rating in accordance with 16 CFR Part 306.

3.12.2.3. NFPA Labeling. – NFPA Labeling requirements also apply. (Refer to NFPA 57.)

3.14. Automatic Transmission Fluid

3.14.1. Labeling. –The label on a container of automatic transmission fluid shall not contain any information that is false or misleading. In addition, each container of automatic transmission fluid shall be labeled with the following:

(a) the brand name;

(b) the name and place of business of the manufacturer, packer, seller, or distributor;

(c) the words "Automatic Transmission Fluid";

(d) the duty type of classification; and

(e) an accurate statement of the quantity of the contents in terms of liquid measure.

3.14.2. Documentation of Claims Made Upon Product Label. –Any manufacturer or packer of any product subject to this article and sold in this state shall provide, upon request of duly authorized representatives of the Director, documentation of any claim made upon their product label.

(Added 2004)

3.15. Biodiesel and Biodiesel Blends

3.15.1. Identification of Product. – Biodiesel shall be identified by the term "biodiesel" with the designation "B100." Biodiesel blends shall be identified by the term "Biodiesel Blend."

3.15.2. Labeling of Retail Dispensers.

3.15.2.1. Labeling of Grade Required. – Biodiesel shall be identified by the grades S15 or S500. Biodiesel blends shall be identified by the grades No. 1-D, No. 2-D, or No. 4-D.

3.15.2.2. EPA Labeling Requirements Also Apply. – Retailers and wholesale purchaser-consumers of biodiesel blends shall comply with EPA pump labeling requirements for sulfur under 40 CFR § 80.570.

3.15.2.3. Automotive Fuel Rating. –Biodiesel and biodiesel blends shall be labeled with its automotive fuel rating in accordance with 16 CFR Part 306.

3.15.2.4. Biodiesel Blends. – When biodiesel blends greater than 20 % by volume are offered by sale, each side of the dispenser where fuel can be delivered shall have a label conspicuously placed that states "Consult Vehicle Manufacturer Fuel Recommendations."

The lettering of this legend shall not be less than 6 mm (¼ in) in height by 0.8 mm (1/32 in) stroke; block style letters and the color shall be in definite contrast to the background color to which it is applied.

3.15.3. Documentation for Dispenser Labeling Purposes. – The retailer shall be provided, at the time of delivery of the fuel, a declaration of the volume percent biodiesel on an invoice, bill of lading, shipping paper, or other document. This documentation is for dispenser labeling purposes only; it is the responsibility of any potential blender to determine the amount of biodiesel in the diesel fuel prior to blending.

3.15.4. Exemption. – Biodiesel blends that contain less than or equal to 5 % biodiesel by volume are exempted from the requirements of Sections 3.15.1. Identification of Product, 3.15.2. Labeling of Retail Dispensers, and 3.15.3. Documentation for Dispenser Labeling Purposes when it is sold as "diesel fuel" as required in Section 3.3. Diesel Fuel.

(Added 2005) (Amended 2008)

3.16. Diesel Exhaust Fluid (DEF).

3.16.1. Labeling of Diesel Exhaust Fluid (DEF). – DEF shall be labeled

3.16.1.1. Retail Dispenser Labeling. –A label shall be clearly and conspicuously placed on the front panel of the DEF dispenser stating, "for operation of selective catalytic reduction (SCR) converters in motor vehicles with diesel engines."

3.16.1.2. Documentation for Retailers of Bulk Product. –A DEF supplier shall provide, at the time of delivery of the bulk shipment of DEF, identification of the fluid's origin including the name of the fluid manufacturer, the brand name, trade name, or trademark, and a statement identifying the fluid as DEF conforming to specifications given in the latest version of ISO 22241, "Diesel engines – NOx reduction agent AUS 32." This information shall be provided by the supplier on an invoice, bill of lading, shipping paper, or other document.

3.16.1.3. Labeling Packaged Product. –Any DEF retail package shall bear a label that includes the name of the fluid manufacturer, the brand name, trade name, or trademark, a statement identifying the fluid as DEF conforming to specifications given in the latest version of ISO 22241, "Diesel engines – NOx reduction agent AUX 32." And the statement, "It is recommended to store DEF between − 5 °C to 30 °C (23 °F to 86 °F)."

3.16.1.4. Documentation for Bulk Deliveries. –A carrier that transports or accepts for transportation any bulk shipment by tank truck, freight container, cargo tank, railcar, or any other vehicle used to transport or deliver bulk quantities of DEF shall, at the time of delivery of the DEF, provide identification of the fluid's origin including the name of the fluid manufacturer, the brand name, trade name, or trademark, and a statement identifying the fluid as DEF conforming to specifications given in the latest version of ISO 22241, "Diesel engines – NOx reduction agent AUS 32." This information shall be provided to the recipient on an invoice, bill of lading, shipping paper, or other document.

Effective date shall be January 1, 2016.

(Added 2014)

2.XX. Transmission Fluid.

2.XX.1. Products for Use in Lubricating Transmissions – Transmission fluids shall meet the original equipment manufacturer's requirements for those transmissions or have demonstrated performance claims to be suitable for use in those transmissions. Where a fluid can be licensed against an original equipment manufacturer's specification, evidence of current licensing by the marketer is acceptable

documentation of performance against the specification. In the absence of a license from the original equipment manufacturer, adherence to the original equipment manufacturer's recommended requirements shall be assessed after testing per relevant methods available to the lubricants industry and the state regulatory agency. Suitability for use claims shall be based upon appropriate field, bench and/or transmission rig testing. Any manufacturer of a transmission fluid making suitable-for-use claims shall provide, upon request by a duly authorized representative of the Director, credible documentation of such claims. If the product performance claims published by a blender and/or marketer are based on the claim(s) of one or more additive suppliers, documentation of the claims may be requested in confidence by a duly authorized representative of the Director. Supporting data may be supplied directly to the Director's office by the additive supplier(s).

2.XX.1.1. Conformance. – Conformance of a fluid per Section 2.XX.1. Products for Use in Lubricating Transmissions does not absolve the obligations of a fluid licensee with respect to the licensing original equipment manufacturer or the original equipment manufacturer's licensing agent(s), where relevant.

2.XX.1.2. Transmission Fluid Additives. – Any material offered for sale or sold as an additive to transmission fluids shall be compatible with the transmission fluid to which it is added, and shall meet all performance claims as stated on the label or published on any website referenced by the label. Any manufacturer of any such product sold in this state shall provide, upon request by a duly authorized representative of the Director, documentation of any claims made on their product label or published on any website referenced by the label.

2.XX.2 Labeling and Identification of Transmission Fluid. – Transmission fluid shall be labeled or identified as described below.

2.XX.2.1. Container Labeling. – The label on a container of transmission fluid shall not contain any information that is false or misleading. Containers include bottles, cans, multi-quart or liter containers, pails, kegs, drums, and intermediate bulk containers (IBCs). In addition, each container of transmission fluid shall be labeled with the following:

(a) the brand name;

(b) the name and place of business of the manufacturer, packer, seller, or distributor;

(c) the words "Transmission Fluid," which may be incorporated into a more specific description of transmission type such as "Automatic Transmission Fluid" or "Continuously Variable Transmission Fluid";

(d) the primary performance claim or claims met by the fluid and reference to where any supplemental claims may be viewed (for example, website reference). Performance claims include but are not limited to those set by original equipment manufacturers and standards-setting organizations such as SAE and JASO and are acknowledged by reference; and

(e) an accurate statement of the quantity of the contents in terms of liquid measure.

2.XX.2.2. Identification on Documentation – Transmission fluid sold in bulk shall be identified on the manufacturer, packer, seller, or distributor invoice, bill of lading, shipping paper, or other documentation with the information listed below:

(a) the brand name;

(b) the name and place of business of the manufacturer, packer, seller, or distributor;

(c) the words "Transmission Fluid," which may be incorporated into a more specific description of transmission type such as "Automatic Transmission Fluid" or "Continuously Variable Transmission Fluid";

(d) the primary performance claim or claims met by the fluid or reference to where these claims may be viewed (for example, website reference). Performance claims include but are not limited to those set by original equipment manufacturers and standards-setting organizations such as SAE and JASO and are acknowledged by reference; and

(e) an accurate statement of the quantity of the contents in terms of liquid measure.

2.XX.2.3. Identification on Service Provider Documentation – Transmission fluid installed from a bulk tank at time of transmission service shall be identified on the customer invoice with the information listed below:

(a) the brand name;

(b) the name and place of business of the service provider;

(c) the words "Transmission Fluid," which may be incorporated into a more specific description of transmission type such as "Automatic Transmission Fluid" or "Continuously Variable Transmission Fluid";

(d) the primary performance claim or claims met by the fluid or reference to where these claims may be viewed (for example, website reference). Performance claims include but are not limited to those set by original equipment manufacturers and standards- setting organizations such as SAE and JASO and are acknowledged by reference; and

(e) an accurate statement of the quantity of the contents in terms of liquid measure.

2.XX.2.4. Bulk Delivery – When the transmission fluid is sold in bulk, an invoice, bill of lading, shipping paper, or other documentation must accompany each delivery. This document must identify the fluid as defined in Section 2.XX.2.2.

2.XX.2.5. Storage Tank Labeling. – Each storage tank of transmission fluid shall be labeled with the following:

(a) the brand name;

(b) the primary performance claim or claims met by the fluid or reference to where these claims may be viewed (for example, website reference). Performance claims include but are not limited to those set by original equipment manufacturers and standards- setting organizations such as SAE and JASO and are acknowledged by reference.

2.XX.3. Documentation of Claims Made Upon Product Label. – Any manufacturer, packer, or distributor of any product subject to this article and sold in this state shall provide, upon request of duly authorized representatives of the Director, credible documentation of any claim made upon their product label, including claims made on any website referenced by said label. If the product performance claims published by a blender and/or marketer are based on the claim(s) of one or more additive suppliers, documentation of the claims may be requested in confidence by a duly authorized representative of the Director. Supporting data may be supplied directly to the Director's office by the additive supplier(s).

~~Section 3.~~ Section 4. General

B2: FLR-3 Section 3. Classification and Method of Sale of Petroleum Products

Purpose:
To consolidate the method of sale information for fuels, lubricants and automotive products into one regulation in Handbook 130.

Item under Consideration:
Amend NIST Handbook 130, Uniform Engine Fuels and Automotive Lubricants Regulation as follows:

Section 3. Classification and Method of Sale of Petroleum Products

3.1. General Considerations.

3.1.1. Classification and Method of Sale of Fuels of Petroleum Products – The classification and method of sale requirements set forth in the NIST Handbook 130, Uniform Regulation for the Method of Sale of Commodities Section 3. Classification and Method of Sale of Fuels, Lubricants and Automotive Products is incorporated into this section by reference. ~~Documentation. When products regulated by this rule are sold, an invoice, bill of lading, shipping paper, or other documentation must accompany each delivery other than a retail sale. This document must identify the quantity, the name of the product, the particular grade of the product, the applicable automotive fuel rating, and oxygenate type and content (if applicable), the name and address of the seller and buyer, and the date and time of the sale. Documentation must be retained at the retail establishment for a period not less than one year.~~

~~(Amended 2008)~~

~~3.1.2. Retail Dispenser Labeling. All retail dispensing devices must identify conspicuously the type of product, the particular grade of the product, and the applicable automotive fuel rating.~~

~~3.1.3. Grade Name. The sale of any product under any grade name that indicates to the purchaser that it is of a certain automotive fuel rating or ASTM grade shall not be permitted unless the automotive fuel rating or grade indicated in the grade name is consistent with the value and meets the requirements of Section 2, Standard Fuel Specifications.~~

And delete the following sections in their entirety:

~~3.2. Automotive Gasoline and Automotive Gasoline-Oxygenate Blends.~~
~~3.3. Diesel Fuel.~~
~~3.4. Aviation Turbine Fuels.~~
~~3.5. Aviation Gasoline.~~
~~3.6. Fuel Oils.~~
~~3.7. Kerosene (Kerosine).~~
~~3.8. Ethanol Flex Fuel.~~
~~3.9. M85 Fuel Methanol.~~
~~3.10. Liquefied Petroleum Gas (LPG).~~
~~3.11. Compressed Natural Gas (CNG).~~
~~3.12. Liquefied Natural Gas (LNG).~~
~~3.13. Oil.~~
~~3.14. Transmission Fluid.~~
~~3.15. Biodiesel and Biodiesel Blends.~~
~~3.16. Diesel Exhaust Fluid (DEF).~~

B2: FLR-4 Sections 1.12. Compressed Natural Gas (CNG), 1.14. Diesel Exhaust Fluid (DEF), 1.26. Gasoline Gallon Equivalent (GGE), 1.XX. Diesel Gallon Equivalent (DGE), and 1.36. Liquefied Natural Gas Equivalent (LNG)

Purpose:
To harmonize the definitions for natural gas fuels and diesel exhaust fluid in the Uniform Engine Fuels and Automotive Lubricants Regulation with the definitions in the Uniform Regulation for the Method of Sale of Commodities.

Item under Consideration:
Amend NIST Handbook 130, Uniform Engine Fuels and Automotive Lubricants Regulation as follows:

1.12. Compressed Natural Gas (CNG). – ~~**Natural gas which has been compressed and dispensed into fuel storage containers and is suitable for use as an engine fuel.**~~ **A gaseous fuel composed primarily of methane that is suitable for compression and dispensing into a fuel storage container(s) for use as an engine fuel.**
(Amended 20XX)

1.14. Diesel Exhaust Fluid (DEF). – A preparation of aqueous urea [(NH2)2CO], containing 32.5 % by mass of technically-pure urea in high-purity water with quality characteristics defined by the latest version of ISO 22241, "Diesel engines - NOx reduction agent AUS ~~**21**~~**32**."

1.26. Gasoline Gallon Equivalent (GGE). – ~~**Equivalent to 2.567 kg (5.660 lb) of natural gas.**~~ **Gasoline gallon equivalent (GGE) means 2.567 kg (5.660 lb) of compressed natural gas.**
(Amended 20XX)

1.XX. Diesel Gallon Equivalent (DGE). – Diesel gallon equivalent means 6.384 lb of compressed natural gas or 6.059 lb of liquefied natural gas.
(Added 20XX)

1.36. Liquefied Natural Gas (LNG). – Natural gas**, which is predominantly methane,** that has been liquefied at – 162 °C (− 260 °F) **at 14.696** psia and stored in insulated cryogenic **fuel storage tanks** for use as an engine fuel.
(Amended 20XX)

Background/Discussion: See Appendix A, Page L&R-A8.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

ITEM BLOCK 3 (B3) GASOLINE-OXYGENATE BLENDS AND FLEX-FUEL BLENDS

Source:
KMoore Consulting, LLC (2017)

Purpose:
Align the duplicative labeling wording for Gasoline-Oxygenate Blends and Ethanol Flex Fuel blends that appears in Section B: Uniform Regulation for the Method of Sale of Commodities with the proposed Section G. Ethanol labeling being proposed by the Handbook 130 Focus Group.

B3: MOS-4 Section 2.20. Gasoline – Oxygenate Blends and Section 2.30. Ethanol Flex-Fuel

Item under Consideration:
Amend NIST Handbook 130, Uniform Method of Sale of Commodities Regulation as follows:

2.20. Gasoline-Oxygenate Blends.

2.20.1. Method of Retail Sale. – Type of Oxygenate must be Disclosed. – All automotive gasoline or automotive gasoline-oxygenate blends kept, offered, or exposed for sale, or sold at retail containing at least 1.5 mass percent oxygen shall be identified as "with" or "containing" (or similar wording) the predominant oxygenate in the engine fuel. For example, the label may read "contains ethanol" or "with MTBE." The oxygenate contributing the largest mass percent oxygen to the blend shall be considered the predominant oxygenate. Where mixtures of only ethers are present, the retailer may post the predominant oxygenate followed by the phrase "or other ethers" or alternatively post the phrase "contains MTBE or other ethers." In addition, gasoline-methanol blend fuels containing more than 0.15 mass percent oxygen from methanol shall be identified as "with" or "containing" methanol. This information shall be posted on the upper 50 % of the dispenser front panel in a position clear and conspicuous from the driver's position in a type at least 12.7 mm (½ in) in height, 1.5 mm ($^1/_{16}$ in) stroke (width of type).
(Amended 1996)

2.20.2. Documentation for Dispenser Labeling Purposes. – The retailer shall be provided, at the time of delivery of the fuel, on product transfer documents such as an invoice, bill of lading, shipping paper, or other documentation:

(a) Information that complies with 40 CFR § 80.1503 when the fuel contains ethanol.

(b) For fuels that do not contain ethanol, information that complies with 40 CFR § 80.1503 and a declaration of the predominant oxygenate or combination of oxygenates present in concentrations sufficient to yield an oxygen content of at least 1.5 mass percent in the fuel. Where mixtures of only ethers are present, the fuel supplier may identify either the predominant oxygenate in the fuel (i.e., the oxygenate contributing the largest mass percent oxygen) or alternatively, use the phrase "contains MTBE or other ethers."

(c) Gasoline containing more than 0.15 mass percent oxygen from methanol shall be identified as "with" or "containing" methanol.

(Added 1984) (Amended 1985, 1986, 1991, 1996, and 2014)

2.20.3. EPA Labeling Requirements Also Apply. – Retailers and wholesale purchaser-consumers of gasoline shall comply with the EPA pump labeling requirements for gasoline containing greater than 10 volume percent (v%) up to 15 volume percent (v%) ethanol (E15) under 40 CFR § 80.1501 (for additional information refer to Section 2.30.2. Labeling Requirements).

(Added 20XX)

2.30. Ethanol Flex Fuel.

2.30.1. How to Identify Ethanol Flex Fuel. – Ethanol flex fuel shall be identified as "Ethanol Flex Fuel or EXX Flex Fuel."

2.30.2. Labeling Requirements.

(a) Ethanol flex fuel **shall be identified and labeled in accordance with Federal Trade Commission Automotive Fuel Ratings, Certification and Posting Rule, 16 CFR, as amended ~~with an ethanol concentration no less than 51 and no greater than 83 volume percent shall be labeled "Ethanol Flex Fuel, minimum 51 % ethanol~~."** **(for additional information refer to Section 2.20.3. EPA Labeling Requirements Also Apply).**

(Amended 2014 **and 20XX)**

~~**(b) Ethanol flex fuel with an ethanol concentration less than or equal to 50 volume percent shall be labeled "EXX Flex Fuel, minimum YY % ethanol," where the XX is the target ethanol concentration in volume percent and YY is XX minus five (– 5). The actual ethanol concentration of the fuel shall be XX volume percent plus or minus five (± 5) volume percent.**~~

~~**(Added 2014)**~~

~~**(c) A label shall be posted which states "For Use in Flexible Fuel Vehicles (FFV) Only." This information shall be clearly and conspicuously posted on the upper 50 % of the dispenser front panel in a type at least 12.7 mm (½ in) in height, 1.5 mm (1/16 in) stroke (width of type). A label shall be posted which states, "CHECK OWNERS MANUAL," and shall not be less than 6 mm (¼ in) in height by 0.8 mm (1/32 in) stroke; block style letters and the color shall be in definite contrast to the background color to which it is applied.**~~

~~**(Amended 2014)**~~

(Added 2007**)** (Amended 2014 **and 20XX**)

B3: FLR-5 Section 3.28. EPA Labeling Requirements Also Apply and Section 3.8. Ethanol Flex Fuel

Source:
KMoore Consulting LLC (2017)

Purpose:
Align the ethanol labeling language with the recently released Federal Trade Commission updates to 16 CFR Part 306 on the Automotive Fuel Rating Rule as it pertains to ethanol fuel blend rating, labeling on retail dispensers, certification and recordkeeping requirements.

Item under Consideration:
Amend NIST Handbook 130, Uniform Engine Fuels and Automotive Lubricants Regulation as follows:

3.2.8. EPA Labeling Requirements Also Apply – Retailers and wholesale purchaser-consumer of gasoline shall comply with the EPA pump labeling requirements for gasoline containing greater than 10 volume percent (V%) up to 15 volume percent (V%) ethanol (E15) under 40 CFR § 80.1501 **(for additional information refer to Section 3.8.2. Labeling Requirements).**

3.8. Ethanol Flex Fuel.

3.8.1. How to Identify Ethanol Flex Fuel. – Ethanol flex fuel shall be identified as Ethanol Flex Fuel or EXX Flex Fuel.

3.8.2. Labeling Requirements.

~~**(a)**~~ Ethanol flex fuel ~~**with an ethanol concentration no less than 51 and no greater than 83 volume percent shall be labeled "Ethanol Flex Fuel, minimum 51 % ethanol."**~~ **shall be identified and labeled in accordance with the Federal Trade Commission Automotive Fuel Ratings, Certification and Posting Rule, 16 CFR Part 306, as amended (for additional information refer to Section 3.2.8. EPA Labeling Requirements Also Apply).**

(Amended 20XX)

~~(b) Ethanol flex fuel with an ethanol concentration less than or equal to 50 volume percent shall be labeled "EXX Flex Fuel, minimum YY % ethanol," where the XX is the ethanol concentration in volume percent and YY is XX minus five (– 5). The actual ethanol concentration of the fuel shall be XX volume percent plus or minus five (± 5) volume percent.~~

~~(Added 2014)~~

~~(c) A label shall be posted which states "For Use in Flexible Fuel Vehicles (FFV) Only." This information shall be clearly and conspicuously posted on the upper 50 % of the dispenser front panel in a type at least 12.7 mm (. in) in height, 1.5 mm (1/16 in) stroke (width of type). A label shall be posted which states, "CHECK OWNER'S MANUAL," and shall not be less than 6 mm (. in) in height by 0.8 mm (1/32 in) stroke; block style letters and the color shall be in definite contrast to the background color to which it is applied.~~

(Amended 2007, 2008, ~~**and**~~ 2014, **and 20XX**)

Background/Discussion: See Appendix A, Page L&R-A10.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

ITEM BLOCK 4 (B4) GASOLINE AND GASOLINE WITH ETHANOL

Source:
Archer Daniels Midland Corporation (2018)

Purpose:
Harmonize the method of sale information related to gasoline, with and without ethanol, in section B Uniform Regulation for the Method of Sale of Commodities with the information in section G Uniform Engine Fuels and Automotive Lubricants Regulation. Harmonize terminology in Handbook 130 related to ethanol containing fuels with federal regulations and add references to federal regulations in section G Uniform Engine Fuels and Automotive Lubricants Regulation.

B4: MOS-5 Section 2.20. Gasoline – Oxygenate Blends

Item under Consideration:
Amend NIST Handbook 130, Uniform Method of Sale of Commodities Regulation as follows:

~~2.20. Gasoline-Oxygenate Blends.~~

~~2.20.1. Method of Retail Sale. – Type of Oxygenate must be Disclosed. – All automotive gasoline or automotive gasoline-oxygenate blends kept, offered, or exposed for sale, or sold at retail containing at least 1.5 mass percent oxygen shall be identified as "with" or "containing" (or similar wording) the predominant oxygenate in the engine fuel. For example, the label may read "contains ethanol" or "with MTBE." The oxygenate contributing the largest mass percent oxygen to the blend shall be considered the predominant oxygenate. Where mixtures of only ethers are present, the retailer may post the predominant oxygenate followed by the phrase "or other ethers" or alternatively post the phrase "contains MTBE or other ethers." In addition, gasoline-methanol blend fuels containing more than 0.15 mass percent oxygen from methanol shall be identified as "with" or "containing" methanol. This information shall be posted on the upper 50 % of the dispenser front panel in a position clear and conspicuous from the driver's position in a type at least 12.7 mm (½ in) in height, 1.5 mm (1/16 in) stroke (width of type).~~

~~**(Amended 1996)**~~

~~**2.20.2. Documentation for Dispenser Labeling Purposes. The retailer shall be provided, at the time of delivery of the fuel, on product transfer documents such as an invoice, bill of lading, shipping paper, or other documentation:**~~

~~**(a) Information that complies with 40 CFR § 80.1503 when the fuel contains ethanol.**~~

~~**(b) For fuels that do not contain ethanol, information that complies with 40 CFR § 80.1503 and a declaration of the predominant oxygenate or combination of oxygenates present in concentrations sufficient to yield an oxygen content of at least 1.5 mass percent in the fuel. Where mixtures of only ethers are present, the fuel supplier may identify either the predominant oxygenate in the fuel (i.e., the oxygenate contributing the largest mass percent oxygen) or alternatively, use the phrase "contains MTBE or other ethers."**~~

~~**(c) Gasoline containing more than 0.15 mass percent oxygen from methanol shall be identified as "with" or "containing" methanol.**~~

~~**(Added 1984) (Amended 1985, 1986, 1991, 1996, and 2014)**~~

3.2. Automotive Gasoline.

3.2.1. How to Identify Gasoline. – All fuels sold as Gasoline shall be identified as Gasoline along with the grade name and automotive fuel rating.

3.2.1~~2~~2. Posting of Antiknock Index Required. – All automotive gasoline shall post the antiknock index in accordance with applicable regulations, 16 CFR Part 306 issued pursuant to the Petroleum Marketing Practices Act, as amended.

3.2.2~~3~~3. When the Term "Leaded" May be Used. – The term "leaded" shall be used only when the fuel meets specification requirements of paragraph 2.1.5. Minimum Lead Content to be Termed "Leaded."

3.2.3~~4~~4. Use of Lead Substitute Must be Disclosed. – Each dispensing device from which gasoline containing a lead substitute is dispensed shall display the following legend: "Contains Lead Substitute." The lettering of this legend shall not be less than 12.7 mm (½ in) in height and the color of the lettering shall be in definite contrast to the background color to which it is applied.

3.2.4~~5~~5. Nozzle Requirements for Leaded Fuel. – Each dispensing device from which gasoline that contain lead in amounts sufficient to be considered "leaded" gasoline, or lead substitute engine fuel, is sold shall be equipped with a nozzle spout having a terminal end with an outside diameter of not less than 23.63 mm (0.930 in). (See 40 CFR 80.24)

3.2.5~~6~~6. Prohibition of Terms. – It is prohibited to use specific terms to describe a grade of gasoline unless it meets the minimum antiknock index requirement shown in Table 1. Minimum Antiknock Index Requirements.

Table 1. Minimum Antiknock Index Requirements		
	Minimum Antiknock Index	
Term	ASTM D4814 Altitude Reduction Areas IV and V	All Other ASTM D4814 Areas
Premium, Super, Supreme, High Test	90	91
Midgrade, Plus	87	89
Regular Leaded	86	88
Regular, Unleaded (alone)	85	87
Economy	--	86

3.2.~~6~~7. Method of Retail Sale. – For oxygenated gasoline, the type of Oxygenate must be disclosed. All automotive gasoline kept, offered, or exposed for sale, or sold at retail containing at least 1.5 mass percent oxygen shall be identified as "with" or "containing" (or similar wording) the predominant oxygenate in the engine fuel. For example, the label may read "contains ethanol" or "with methyl *tertiary*-butyl ether (MTBE)." The oxygenate contributing the largest mass percent oxygen to the blend shall be considered the predominant oxygenate. Where mixtures of only ethers are present, the retailer may post the predominant oxygenate followed by the phrase "or other ethers" or alternatively post the phrase "contains MTBE or other ethers." In addition, gasoline-methanol blend fuels containing more than 0.15 mass percent oxygen from methanol shall be identified as "with" or "containing" methanol. This information shall be posted on the upper 50 % of the dispenser front panel in a position clear and conspicuous from the driver's position in a type at least 12.7 mm (½ in) in height, 1.5 mm (1/16 in) stroke (width of type).

3.2.~~7~~8. Documentation for Dispenser Labeling Purposes. – The retailer shall be provided, at the time of delivery of the fuel, on product transfer documents such as an invoice, bill of lading, shipping paper, or other documentation:

(a) Information that compiles with 40 CFR § 80.1503 when the fuel contains ethanol.

(b) For fuels that do not contain ethanol, information that complies with 40 CFR § 80.1503 and a declaration of the predominant oxygenate or combination of oxygenates present in concentrations sufficient to yield an oxygen content of at least 1.5 mass percent in the fuel. Where mixtures of only ethers are present, the fuel supplier may identify either the predominant oxygenate in the fuel (i.e., the oxygenate contributing the largest mass percent oxygen) or alternatively, use the phrase "contains MTBE or other ethers."

(c) Gasoline containing more than 0.15 mass percent oxygen from methanol shall be identified as "with" or "containing" methanol.

(d) A certification of the automotive fuel rating. (see 16 CFR 306.6)

3.2.~~8~~9. EPA Labeling Requirements Also Apply. – Retailers and wholesale purchaser-consumers of gasoline shall comply with the EPA pump labeling requirements for gasoline containing greater than 10 volume percent (v%) up to 15 volume percent (v%) ethanol (E15) under 40 CFR § 80.1501.

(Amended 20XX)

B4: FLR-6 Sections 1. Definitions, 2.1. Gasoline and Gasoline Oxygenate Blends, 2.7. Denatured Fuel Ethanol. 3.2. Automotive Gasoline and Automotive Gasoline Oxygenate Blends and 4. Retail Storage Tanks and Dispenser Filters

Item under Consideration:
Amend NIST Handbook 130, Uniform Method of Sale of Commodities Regulation as follows:

Section 1. Definitions

1.5. Automotive Gasoline~~, Automotive Gasoline Oxygenate Blend~~. – A type of fuel**, which may or may not contain oxygenates**, suitable for use in spark-ignition automobile engines and also commonly used in marine and non-automotive applications. **(See 40 CFR 80.2(c) and 16 CFR 306.0(i)(1))**

(Amended 20XX)

~~**1.8. Base Gasoline.** – All components other than ethanol in a blend of gasoline and ethanol.~~

1.13. Denatured Fuel Ethanol. – An ethanol blend component for use in gasoline~~ ethanol blends~~ and ethanol flex fuel. The ethanol is rendered unfit for beverage use by the addition of denaturants under formulas approved by the Alcohol and Tobacco Tax and Trade Bureau (TTB) (www.ttb.gov), ~~**by the latest version of ASTM D4806, "Standard Specification for Denatured Fuel Ethanol for Blending with Gasolines for Use as Automotive Spark Ignition Engine Fuel" describes the acceptable denaturants for denatured fuel ethanol to be blended into spark ignition engine fuels**~~. **(See 27 CFR parts 19 and 21 and 40 CFR 80.2(vvv))**

(Amended 2014 **and 20XX**)

1.20. Ethanol. – Also known as "ethyl alcohol." Ethanol is provided in gasoline~~ ethanol blends~~ by blending denatured fuel ethanol. See Section 1.13. Denatured Fuel Ethanol.

(Amended 2014 **and 20XX**)

1.21. Ethanol Flex Fuel. – Blends of ethanol and hydrocarbons**, containing more than 10 percent but not greater than 83 percent ethanol by volume,** restricted for use as fuel in ground vehicles equipped with flexible-fuel spark-ignition engines. **(See 16 CFR 306.0(o)**)

(Amended 2014 **and 20XX**)

1.24. Gasoline. – A volatile mixture**, which may or may not contain oxygenates,** ~~**of liquid hydrocarbons**~~ generally containing small amounts of additives suitable for use as a fuel in a spark-ignition internal combustion engine. **(See 40 CFR 80.2(c) and 16 CFR 306.0(i)(1))**

(Amended 20XX)

~~**1.25. Gasoline-Alcohol Blend.** – A fuel consisting primarily of gasoline and a substantial amount (more than 0.35 mass percent of oxygen, or more than 0.15 mass percent of oxygen if methanol is the only oxygenate) of one or more alcohols.~~

1.28. Oxygenated Gasoline~~ Oxygenate Blend~~. – A ~~**fuel consisting primarily of**~~ gasoline **containing a measurable amount** ~~**along with a substantial amount**~~ (more than 0.35 mass percent of oxygen, or more than 0.15 mass percent of oxygen if methanol is the only oxygenate) of one or more oxygenates. **(See 40 CFR 80.2(rr))**

(Amended 20XX)

1.34. Lead Substitute Engine Fuel. – For labeling purposes, a gasoline ~~**or gasoline-oxygenate blend**~~ that contains a "lead substitute".

(Amended 20XX)

1.35. Leaded. – For labeling purposes, any gasoline ~~**or gasoline-oxygenate blend**~~ which contains more than 0.013 g of lead per liter (0.05 g lead per U.S. gal). ***NOTE:*** *EPA defines leaded fuel as one which contains more than 0.0013 g of phosphorus per liter (0.005 g per U.S. gal), or any fuel to which lead or phosphorus is intentionally added.*

(Amended 20XX)

1.48. Reformulated Gasoline (RFG). – A gasoline ~~**or gasoline-oxygenate blend**~~ certified to meet the specifications and emission reduction requirements established by the Clean Air Act Amendments of 1990, as amended by the Energy Policy Act of 2005, required to be sold for use in automotive vehicles in extreme and severe ozone nonattainment areas and those areas which opt to require reformulated gasoline. **(See 40 CFR 80.2(ee))**

(Amended 2008 **and 20XX**)

1.53. Unleaded. – When used in conjunction with "engine fuel" or "gasoline" means any gasoline ~~**or gasoline-oxygenate blend**~~ to which no lead or phosphorus compounds have been intentionally added and which contains not more than 0.013 g of lead per liter (0.05 g lead per U.S. gallon) and not more than 0.0013 g of phosphorus per liter (0.005 g phosphorus per U.S. gallon). **(See 40 CFR 80.2(g))**

(Amended 20XX)

Section 2. Standard Fuel Specifications

2.1. Gasoline ~~and Gasoline-Oxygenate Blends~~.

2.1.1. Gasoline ~~and Gasoline-Oxygenate Blends~~ (as defined in this regulation)**.** – Shall meet the latest version of ASTM D4814, "Standard Specification for Automotive Spark-Ignition Engine Fuel" ~~**except for the permissible offsets for ethanol blends as provided in Section 2.1.2. Gasoline-Ethanol Blends.**~~

(Added 2009**, amended 20XX**)

2.1.2. Gasoline containing Ethanol ~~-Ethanol Blends.~~ – When gasoline **contains** ~~**is blended with**~~ ethanol, the ethanol shall meet the latest version of ASTM D4806, "Standard Specification for Denatured Fuel Ethanol for Blending with Gasolines for Use as Automotive Spark-Ignition Engine Fuel," ~~**and the blend shall meet the latest version of ASTM D4814, "Standard Specification for Automotive Spark-Ignition Engine Fuel," with the following permissible exceptions:**~~

~~**(a) The maximum vapor pressure shall not exceed the ASTM D4814 limits by more than:**~~

~~**(1) 1.0 psi for blends containing 9 to 10 volume percent ethanol from June 1 through September 15.**~~

~~**(2) 1.0 psi for blends containing one or more volume percent ethanol for volatility classes A, B, C, D from September 16 through May 31.**~~

~~**(3) 0.5 psi for blends containing one or more volume percent ethanol for volatility Class E from September 16 through May 31.**~~

~~**The vapor pressure exceptions in subsections 2.1.2. Gasoline-Ethanol Blends will remain in effect until May 1, 2017, or until ASTM incorporates changes to the vapor pressure maximums for ethanol blends, whichever occurs earlier. (Effective July 28, 2016)**~~

(Amend 2016 **and 20XX**)

~~***NOTE 1: The temperature values (e.g., 54 °C, 50. °C, 41.5 °C) are presented in the format prescribed in ASTM E29 "Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications."***~~

~~***NOTE 2: The values shown above appear only in U.S. customary units to ensure that the values are identical to those in ASTM standards and the Environmental Protection Agency regulation.***~~

(Added 2009) (Amended 2012~~, and~~ 2016 **and 20XX**)

2.1.3. Minimum Antiknock Index (AKI). – The AKI shall not be less than the AKI posted on the product dispenser or as certified on the invoice, bill of lading, shipping paper, or other documentation; **(See 16 CFR 306)**

(Amended 20XX)

2.1.4. Minimum Motor Octane Number. – The minimum motor octane number shall not be less than 82 for gasoline with an AKI of 87 or greater;

2.1.5. Minimum Lead Content to Be Termed "Leaded." – Gasoline ~~**and gasoline-oxygenate blends**~~ sold as "leaded" shall contain a minimum of 0.013 g of lead per liter (0.05 g per U.S. gallon);

(Amended 20XX)

2.1.6. Lead Substitute Gasoline. – Gasoline ~~**and gasoline-oxygenate blends**~~ sold as "lead substitute" gasoline shall contain a lead substitute which provides protection against exhaust valve seat recession equivalent to at least 0.026 g of lead per liter (0.10 g per U.S. gallon).

(Amended 20XX)

2.1.6.1. Documentation of Exhaust Valve Seat Protection. – Upon the request of the Director, the lead substitute additive manufacturer shall provide documentation to the Director that demonstrates that the treatment level recommended by the additive manufacturer provides protection against exhaust valve seat recession equivalent to or better than 0.026 g/L (0.1 g/gal) lead. The Director may review the documentation and approve the lead substitute additive before such additive is blended into gasoline. This documentation shall consist of:

(a) test results as published in the Federal Register by the EPA Administrator as required in Section 211(f)(2) of the Clean Air Act; or

(b) until such time as the EPA Administrator develops and publishes a test procedure to determine the additive's effectiveness in reducing valve seat wear, test results and description of the test procedures used in comparing the effectiveness of 0.026 g per liter lead and the recommended treatment level of the lead substitute additive shall be provided.

2.1.7. Blending. – Leaded, lead substitute, and unleaded **oxygenated** gasoline-~~**oxygenate blends**~~ shall be blended according to the EPA "substantially similar" rule or an EPA waiver for unleaded fuel.

(Amended 20XX)

(Amended 2009 **and 20XX**)

2.7. Denatured Fuel Ethanol. – Intended for **a blend component for gasoline** ~~**blending with gasoline**~~ shall meet the latest version of ASTM D4806, "Standard Specification for Denatured Fuel Ethanol for Blending with Gasolines for Use as Automotive Spark-Ignition Engine Fuel."

(Amended 2014 **and 20XX**)

Section 3. Classification and Method of Sale of Petroleum Products

3.2. Automotive Gasoline ~~**and Automotive Gasoline-Oxygenate Blends**~~**.**

3.2.1. How to Identify Gasoline. – All fuels sold as Gasoline shall be identified as Gasoline along with the grade name and automotive fuel rating.

3.2.~~**1**~~**2. Posting of Antiknock Index Required.** – All automotive gasoline ~~**and automotive gasoline-oxygenate blends**~~ shall post the antiknock index in accordance with applicable regulations, 16 CFR Part 306 issued pursuant to the Petroleum Marketing Practices Act, as amended.

(Amended 20XX)

3.2.~~**2**~~**3. When the Term "Leaded" May be Used.** – The term "leaded" shall be used only when the fuel meets specification requirements of paragraph 2.1.5. Minimum Lead Content to be Termed "Leaded."

3.2.~~**3**~~**4. Use of Lead Substitute Must be Disclosed.** – Each dispensing device from which gasoline ~~**or gasoline-oxygenate blends**~~ containing a lead substitute is dispensed shall display the following legend: "Contains Lead Substitute." The lettering of this legend shall not be less than 12.7 mm (½ in) in height and the color of the lettering shall be in definite contrast to the background color to which it is applied.

(amended 20XX)

3.2.~~**4**~~**5. Nozzle Requirements for Leaded Fuel.** – Each dispensing device from which gasoline ~~**or gasoline-oxygenate blends**~~ that contain lead in amounts sufficient to be considered "leaded" gasoline, or lead substitute engine fuel, is sold shall be equipped with a nozzle spout having a terminal end with an outside diameter of not less than 23.63 mm (0.930 in). **(See 40 CFR 80.24)**

(Amended 20XX)

3.2.~~**5**~~**6. Prohibition of Terms.** – It is prohibited to use specific terms to describe a grade of gasoline ~~**or gasoline-oxygenate blend**~~ unless it meets the minimum antiknock index requirement shown in Table 1. Minimum Antiknock Index Requirements.

Table 1.
Minimum Antiknock Index Requirements

	Minimum Antiknock Index	
Term	**ASTM D4814 Altitude Reduction Areas IV and V**	**All Other ASTM D4814 Areas**
Premium, Super, Supreme, High Test	90	91
Midgrade, Plus	87	89
Regular Leaded	86	88
Regular, Unleaded (alone)	85	87
Economy	--	86

(Table 1. Amended 1997)

(Amended 20XX)

3.2.~~6~~7. Method of Retail Sale. – **~~Type~~ For oxygenated gasoline the type** of Oxygenate must be disclosed. All automotive gasoline **~~or automotive gasoline-oxygenate blends~~** kept, offered, or exposed for sale, or sold at retail containing at least 1.5 mass percent oxygen shall be identified as "with" or "containing" (or similar wording) the predominant oxygenate in the engine fuel. For example, the label may read "contains ethanol" or "with methyl *tertiary*-butyl ether (MTBE)." The oxygenate contributing the largest mass percent oxygen to the blend shall be considered the predominant oxygenate. Where mixtures of only ethers are present, the retailer may post the predominant oxygenate followed by the phrase "or other ethers" or alternatively post the phrase "contains MTBE or other ethers." In addition, gasoline-methanol blend fuels containing more than 0.15 mass percent oxygen from methanol shall be identified as "with" or "containing" methanol. This information shall be posted on the upper 50 % of the dispenser front panel in a position clear and conspicuous from the driver's position in a type at least 12.7 mm (½ in) in height, 1.5 mm (1/16 in) stroke (width of type).

(Amended 1996 **and 20XX**)

3.2.~~7~~8. Documentation for Dispenser Labeling Purposes. – The retailer shall be provided, at the time of delivery of the fuel, on product transfer documents such as an invoice, bill of lading, shipping paper, or other documentation:

(a) Information that compiles with 40 CFR § 80.1503 when the fuel contains ethanol.

(Added 2014)

(b) For fuels that do not contain ethanol, information that complies with 40 CFR § 80.1503 and a declaration of the predominant oxygenate or combination of oxygenates present in concentrations sufficient to yield an oxygen content of at least 1.5 mass percent in the fuel. Where mixtures of only ethers are present, the fuel supplier may identify either the predominant oxygenate in the fuel (i.e., the oxygenate contributing the largest mass percent oxygen) or alternatively, use the phrase "contains MTBE or other ethers."

(Added 2014)

(c) Gasoline containing more than 0.15 mass percent oxygen from methanol shall be identified as "with" or "containing" methanol.

(Added 2014)

(d) A certification of the automotive fuel rating. (see 16 CFR 306.6)

(Amended 1996**, ~~and~~** 2014 **and 20XX**)

3.2.~~8~~9. EPA Labeling Requirements Also Apply. – Retailers and wholesale purchaser-consumers of gasoline shall comply with the EPA pump labeling requirements for gasoline containing greater than 10 volume percent (v%) up to 15 volume percent (v%) ethanol (E15) under 40 CFR § 80.1501.

(Added 2012, **amended 20XX**)

Section 4. Retail Storage Tanks and Dispenser Filters

4.1. Water in Gasoline containing ethanol ~~Alcohol Blends~~, Biodiesel Blends, Ethanol Flex Fuel, Aviation Gasoline, and Aviation Turbine Fuel. – No water phase greater than 6 mm (¼ in) as determined by an

appropriate detection paste or other acceptable means, is allowed to accumulate in any tank utilized in the storage of gasoline **containing ethanol** ~~**alcohol blend**~~, biodiesel, biodiesel blends, ethanol flex fuel, aviation gasoline, and aviation turbine fuel.

(Amended 2008, 2012, ~~**and**~~ 2014 **and 20XX**)

4.2. Water in Gasoline not containing ethanol, Diesel, ~~**Gasoline-Ether,**~~ **and Other Fuels.** – Water shall not exceed 25 mm (1 in) in depth when measured with water indicating paste or other acceptable means in any tank utilized in the storage of diesel, gasoline, gasoline-ether blends, and kerosene sold at retail except as required in Section 4.1. Water in Gasoline **containing ethanol** ~~**Alcohol Blends,**~~ Biodiesel Blends, Ethanol Flex Fuel, Aviation Gasoline, and Aviation Turbine Fuel.

(Amended 2008, 2012, ~~**and**~~ 2014 **and 20XX**)

4.3. Dispenser Filters.

4.3.1. Engine Fuel Dispensers.

(a) All gasoline, ~~**gasoline-alcohol blends, gasoline-ether blends,**~~ ethanol flex fuel, and M85 methanol dispensers shall have a 10 micron or smaller nominal pore-sized filter.

(b) All biodiesel, biodiesel blends, diesel, and kerosene dispensers shall have a 30 micron or smaller nominal pore-sized filter.

(Amended 2014 **and 20XX**)

Background/Discussion: See Appendix A, Page L&R-A11.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

ITEM BLOCK 5 (B5) OBSOLETE MOTOR OILS

Source:
Independent Lubricant Manufacturers Association (ILMA) (2018)

Purpose:
Provide information to protect consumers from purchasing obsolete motor oils that can harm modern engines.

B5: MOS-6 Section 2.33. Oil

Item under Consideration:
Amend NIST Handbook 130, Uniform Method of Sale of Commodities Regulation as follows:

2.33. Oil.

2.33.1. Labeling of Vehicle Engine (Motor) Oil. – Vehicle engine (motor) oil shall be labeled.

2.33.1.1. Viscosity Grade. – The label on any vehicle engine (motor) oil container, receptacle, dispenser, or storage tank, and any invoice or receipt from service on an engine that includes the installation of vehicle engine (motor) oil dispensed from a receptacle, dispenser, or storage tank, shall contain the viscosity grade classification preceded by the letters "SAE" in accordance with SAE International's latest version of SAE J300, "Engine Oil Viscosity Classification." **Containers used in retail trade (such as bottles, jugs, pails, drums) are explicitly targeted by this legislation. Where possible in the available space, invoices and receipts shall also display the SAE Viscosity Grade (see Note).**

2.33.1.1.1. Most modern engine oil specifications are for multigrade products, and their SAE viscosity grade must appear in the form SAE XXW-YY. The use of "SAE" and of the hyphen are mandatory. Containers used in retail trade (such as bottles, jugs, pails, drums) are explicitly targeted by this legislation.

2.33.1.1.2. Engine oils marketed under obsolete API Categories SA and SB shall not be described as multigrades.

NOTE: *If an invoice or receipt from service on an engine has limited room for identifying the viscosity, brand, and service category, then abbreviated versions of each may be used on the invoice or receipt and the letters "SAE" may be omitted from the viscosity classification.*

(Note added 2014)

(Amended 2014)

2.33.1.2. Brand. – The label on any vehicle engine (motor) oil container and the invoice or receipt from service on an engine that includes the installation of bulk vehicle engine (motor) oil dispensed from a receptacle, dispenser, or storage tank shall contain the name, brand, trademark, or trade name of the vehicle engine (motor) oil.

(Amended 2014)

Note: If an invoice or receipt from service on an engine has limited room for identifying the viscosity, brand, and service category, then abbreviated versions of each may be used on the invoice or receipt and the letters "SAE" may be omitted from the viscosity classification.

2.33.1.3. Engine Service Category. – The label on any vehicle engine (motor) oil container, receptacle, dispenser, or storage tank and the invoice or receipt from service on an engine that includes the installation of bulk vehicle engine (motor) oil dispensed from a receptacle, dispenser, or storage tank shall contain **~~the~~at least one** engine service category, **~~or categories,~~** displayed in letters not less than 3.18 mm (1/8 in) in height, as defined by the latest version of SAE J183, "Engine Oil Performance and Engine Service Classification (Other than "Energy Conserving")," API Publication 1509, "Engine Oil Licensing and Certification System," European Automobile Manufacturers Association (ACEA), "European Oil Sequences," or other Vehicle or Engine Manufacturer standards as approved in Section 2.33.1.3.1. Vehicle or Engine Manufacturer Standard**. Containers used in retail trade (such as bottles, jugs, pails, drums) are explicitly targeted by this legislation.**

(Amended 2014 **and 20XX**)

2.33.1.3.1. Vehicle or Engine Manufacturer Standard. – The label on any vehicle engine (motor) oil container, receptacle, dispenser, or storage tank and the invoice or receipt from service on an engine that includes the installation of vehicle engine (motor) oil dispensed from a receptacle, dispenser, or storage tank shall identify the specific vehicle or engine manufacturer standard, or standards, met in letters not less than 3.18 mm (1/8 in) in height. If the vehicle (motor) oil only meets a**n active** vehicle or engine manufacturer standard, the label must clearly identify that the oil is only intended for use where specifically recommended by the vehicle or engine manufacturer. **Containers used in retail trade (such as bottles, jugs, pails, drums) are explicitly targeted by this legislation.**

(Added 2014**, Amended 20XX**)

2.33.1.3.2. Inactive or Obsolete Service Categories. – The label on any vehicle engine (motor) oil container, receptacle, dispenser, or storage tank and the invoice or receipt from service on an engine that includes the installation of bulk vehicle engine (motor) oil dispensed from a receptacle, dispenser, or storage tank shall bear a plainly visible cautionary statement in compliance with the latest version of SAE J183, Appendix A, whenever the vehicle engine (motor) oil in the container or in bulk does not meet an active API service category as defined by the latest version of SAE J183, "Engine Oil Performance and Engine Service Classification (Other than "Energy Conserving~~"). If a vehicle engine (motor) oil is identified as only meeting a vehicle or engine manufacturer standard, the labeling requirements in Section 2.33.1.3.1. Vehicle or Engine Manufacturer Standard applies.~~ **Marketing of engine oils corresponding to obsolete performance categories as defined in SAE J183 is expressly forbidden, except for antique vehicles requiring non-detergent motor oils corresponding to API Categories SA or SB. Marketers and/or Retailers of products corresponding to API performance categories SA and SB must take judicious steps to ensure that these products are targeted to the engines intended to receive these materials. Such steps should include confinement of these products away from retail shelves featuring engine oils meeting current performance categories. Containers used in retail trade (such as bottles, jugs, pails, drums) are explicitly targeted by this legislation. Beyond product controls, the minimum labeling standard for compliance with this requirement requires the marketer to print one of the following statements, in accordance with the Category claimed, in letters not less than 6.35 mm (1/4 in) in height on the front label of any product marketed under API categories SA and SB:**

(Amended 2014**, 20XX**)

2.33.1.3.2.a API SA Category. – WARNING: THIS PRODUCT IS NOT SUITABLE FOR USE IN MOST GASOLINE-POWERED AUTOMOTIVE ENGINES BUILT AFTER 1930.

2.33.1.3.2.b API SB Category: – WARNING: THIS PRODUCT IS NOT SUITABLE FOR USE IN MOST GASOLINE-POWERED AUTOMOTIVE ENGINES BUILT AFTER 1951.

2.33.1.3.3. In addition to the minimum labeling standard described in 2.33.1.3.2, marketers shall include the full language expressing Category obsolescence in the latest edition of SAE J183 at time of manufacture.

2.33.1.3.3.a. API SA engine oils should bear the following text on the rear label, in letters not less than 3.18 mm (1/8 in) in height:

CAUTION: THIS OIL IS RATED API SA. IT CONTAINS NO ADDITIVES. IT IS NOT SUITABLE FOR USE IN MOST GASOLINE-POWERED AUTOMOTIVE ENGINES BUILT AFTER 1930. USE IN MODERN ENGINES MAY CAUSE UNSATISFACTORY ENGINE PERFORMANCE OR EQUIPMENT HARM.

2.33.1.3.3.b. API SB engine oils should bear the following text on the rear label, in letters not less than 3.18 mm (1/8 in) in height:

CAUTION: THIS OIL IS RATED API SB AND IS NOT SUITABLE FOR USE IN MOST GASOLINE-POWERED AUTOMOTIVE ENGINES BUILT AFTER 1951. USE IN MORE MODERN ENGINES MAY CAUSE UNSATISFACTORY PERFORMANCE OR EQUIPMENT HARM.

2.33.1.3.4 Motorcycles, where wet clutches are present in the design, may not operate properly with highly friction-modified engine oils. As a result, motorcycle OEMs may recommend obsolete category oils in an attempt to avoid friction-modified formulations. Frequently, such recommendations are for "API SG" performance levels. All engine oils intended for the motorcycle market, claiming obsolete categories as defined within SAE J183, must be clearly

identified "WARNING: FOR MOTORCYCLE USE ONLY" on the front label, in letters not less than 6.35 mm (1/4") in height.

2.33.1.3.5. If a vehicle engine (motor) oil is identified as only meeting a vehicle or engine manufacturer standard, the labeling requirements in Section 2.33.1.3.1. Vehicle or Engine Manufacturer Standard apply.

2.33.1.4. Tank Trucks or Rail Cars. – Tank trucks, rail cars, and other types of delivery trucks that are used to deliver bulk vehicle engine (motor) oil are not required to display the SAE viscosity grade and service category or categories on such tank trucks, rail cars, and other types of delivery trucks. **However, their bill of lading must clearly identify the product present in each compartment per 2.33.1.1.**

(Amended 2013**, ~~and~~** 2014 **and 20XX**)

2.33.1.5. Documentation. – When the engine (motor) oil is sold in bulk, an invoice, bill of lading, shipping paper, or other documentation must accompany each delivery. This document must identify the quantity of bulk engine (motor) oil delivered as defined in Sections 2.33.1.1. Viscosity; 2.33.1.2. Brand; 2.33.1.3. Engine Service Category; the name and address of the seller and buyer; and the date and time of the sale. For inactive or obsolete service categories, the documentation shall also bear a plainly visible cautionary statement as required in Section 2.33.1.3.2. Inactive or Obsolete Service Categories. Documentation must be retained at the retail establishment for a period of not less than one year.

(Added 2013) (Amended 2014)

(Added 2012) (Amended 2013 and 2014)

B5: FLR-7 Sections 1.43. Motor Oil, 1.44. Racing Oil, 3.13. Oil and 7.2. Reproducibility Limits.

Item under Consideration:
Amend NIST Handbook 130, Uniform Engine Fuels and Automotive Lubricants Regulation as follows:

1.43. Motor Oil. – An oil that reduces friction and wear between the moving parts within a reciprocating internal combustion engine and also serves as a coolant. For the purposes of this regulation, "vehicle motor oil" refers to motor oil which is intended for use in light- to heavy-duty vehicles including cars, sport utility vehicles, vans, trucks, buses, and off-road farming and construction equipment. **~~For the purposes of this regulation, "recreational motor oil" refers to motor oil which is intended for use in four-stroke cycle engines used in motorcycles, ATVs, and lawn and garden equipment. For the purposes of this regulation, motor oil also means engine oil.~~**
(Added 2004**, Amended 20XX**)

1.43.1. For the purposes of this regulation, "recreational motor oil" refers to motor oil which is intended for use in four-stroke cycle engines used in motorcycles (including minibikes and "dirt bikes"), ATVs, golf carts or other self-propelled vehicles that are not passenger cars.

1.43.2. For the purposes of this legislation, "non-transportation motor oil" refers to motor oil which is intended for use in stationary engines (such as those used in generators) and lawn and garden equipment. In particular, monograde products falling under the description of "non-transportation motor oil" (most commonly for lawn and garden equipment) shall be labelled with the following cautionary statement, in letters not less than 6.35 mm (1/4 in) in height:

WARNING: THIS PRODUCT IS GENERALLY NOT RECOMMENDED FOR USE IN GASOLINE-FUELED PASSENGER CAR ENGINES.

1.43.3. Some of the engines and vehicles described in 1.43.1 and 1.43.2 (such as riding lawnmowers "dirt bikes" and golf carts) may occasionally cross, or briefly transit on, public roads, but should not be construed as passenger vehicles for the purpose of this legislation. Thus, their engine oils are exempt from the requirement of featuring at least one active performance category or OEM credential. However, recreational motor oils and non-transportation motor oils shall be labelled with the following cautionary statement, in letters not less than 6.35 mm (1/4 in) in height:

WARNING: THIS PRODUCT IS NOT RECOMMENDED FOR USE IN GASOLINE-FUELED PASSENGER CAR ENGINES. IT IS INTENDED FOR USE IN RECREATIONAL (SUCH AS ATV) OR WORKING EQUIPMENT (SUCH AS GARDEN EQUIPMENT) APPLICATIONS.

1.44. Racing Oil. -- An oil that reduces friction and wear between the moving parts within a reciprocating internal combustion engine and also serves as a coolant. For the purposes of this regulation, "racing oil" refers to motor oil which is intended for use in high-performance engines used in vehicles whose primary function excludes the transport of persons on public roads and highways. The vehicles requiring racing oils are generally race cars, dragsters, hot rods, funny cars and other vehicles modified for racing and/or spectator performance. The engines in such vehicles are often modified from standard OEM production, operated on fuels other than retail gasoline, and/or custom-built, and so Racing Oils are exempt from the requirement of featuring at least one active performance category or OEM credential. However, racing oils shall be labelled with the following cautionary statement, in letters not less than 6.35 mm (1/4 in) in height:

WARNING: THIS PRODUCT IS NOT RECOMMENDED FOR USE IN GASOLINE-FUELED PASSENGER CAR ENGINES. IT IS INTENDED FOR USE IN RACING APPLICATIONS.

(Renumber sections that follow)

And:

3.13. Oil.

3.13.1. Labeling of Vehicle Engine (Motor) Oil Required.

3.13.1.1. Viscosity. – The label on any vehicle engine (motor) oil container, receptacle, dispenser, or storage tank and the invoice or receipt from service on an engine that includes the installation of bulk vehicle engine (motor) oil dispensed from a receptacle, dispenser, or storage tank shall contain the viscosity grade classification preceded by the letters "SAE" in accordance with the SAE International's latest version of SAE J300, "Engine Oil Viscosity Classification." **Containers used in retail trade (such as bottles, jugs, pails, drums) are explicitly targeted by this legislation. Where possible in the available space, invoices and receipts shall also display the SAE Viscosity Grade (see Note).**

(Amended 2012**, ~~and~~** 2014 **and 20XX**)

3.13.1.1.1 Most modern engine oil specifications are for multigrade products, and their SAE viscosity grade must appear in the form SAE XXW-YY. The use of "SAE" and of the hyphen are mandatory. Containers used in retail trade (such as bottles, jugs, pails, drums) are explicitly targeted by this legislation.

3.13.1.1.2 Engine oils marketed under obsolete API Categories SA and SB shall not be described as multigrades.

Note: If an invoice or receipt from service on an engine has limited room for identifying the viscosity, brand, and service category, then abbreviated versions of each may be used on the invoice or receipt and the letters "SAE" may be omitted from the viscosity classification.

3.13.1.2. Brand. – The label on any vehicle engine (motor) oil container and the invoice or receipt from service on an engine that includes the installation of bulk vehicle engine (motor) oil dispensed from a receptacle, dispenser, or storage tank shall contain the name, brand, trademark, or trade name of the vehicle engine (motor) oil.

(Added 2012 and 2014)

Note: If an invoice or receipt from service on an engine has limited room for identifying the viscosity, brand, and service category, then abbreviated versions of each may be used on the invoice or receipt and the letters "SAE" may be omitted from the viscosity classification.

3.13.1.3. Engine Service Category. – The label on any vehicle engine (motor) oil container, receptacle, dispenser or storage tank and the invoice or receipt from service on an engine that includes the installation of bulk vehicle engine (motor) oil dispensed from a receptacle, dispenser, or storage tank shall contain **~~the~~at least one active** engine service category, **~~or categories,~~** displayed in letters not less than 3.18 mm (⅛ in) in height, as defined by the latest version of SAE J183, "Engine Oil Performance and Engine Service Classification (Other than "Energy Conserving")" API Publication 1509, "Engine Oil Licensing and Certification System," European Automobile Manufacturers Association (ACEA), "European Oil Sequences," or other "Vehicle or Engine Manufacturer Standards" as provided in Section 3.13.1.3.1. **Containers used in retail trade (such as bottles, jugs, pails, drums) are explicitly targeted by this legislation.**

(Amended 2012**,** ~~**and**~~ 2014 **and 20XX**)

3.13.1.3.1. Vehicle or Engine Manufacturer Standard. – The label on any vehicle engine (motor) oil container, receptacle, dispenser, or storage tank and the invoice or receipt from service on an engine that includes the installation of vehicle engine (motor) oil dispensed from a receptacle, dispenser, or storage tank shall identify the specific vehicle or engine manufacturer standard, or standards, met in letters not less than 3.18 mm (⅛ in) in height. If the vehicle (motor) oil only meets a vehicle or engine manufacturer standard, the label must clearly identify that the oil is only intended for use where specifically recommended by the vehicle or engine manufacturer. **Containers used in retail trade (such as bottles, jugs, pails, drums) are explicitly targeted by this legislation.**

(Added 2014**, Amended 20XX**)

3.13.1.3.2. Inactive or Obsolete Service Categories. – The label on any vehicle engine (motor) oil container, receptacle, dispenser, or storage tank and the invoice or receipt from service on an engine that includes the installation of vehicle engine (motor) oil dispensed from a receptacle, dispenser, or storage tank shall bear a plainly visible cautionary statement in compliance with the latest version of SAE J183, "Engine Oil Performance and Engine Service Classification (Other than "Energy Conserving")" Appendix A, whenever the vehicle engine (motor) oil in the container or in bulk does not meet an active API service category as defined by the latest version of SAE J183, "Engine Oil Performance and Engine Service Classification (Other than "Energy Conserving")." ~~**If a vehicle engine (motor) oil is identified as only meeting a vehicle or engine manufacturer standard, the labeling requirements in Section 3.13.1.3.1. Vehicle or Engine Manufacturer Standard applies. Marketing of engine oils corresponding to obsolete performance categories as defined in SAE J183 is expressly forbidden, except for antique vehicles requiring non-detergent motor oils corresponding to API Categories SA or SB. Marketers and/or Retailers of products corresponding to API performance categories SA and SB must take judicious steps to ensure that these products are targeted to the engines intended to receive these materials. Such steps should include confinement of these products away from retail shelves featuring engine oils meeting current performance categories. Containers used in retail trade (such as bottles, jugs, pails, drums) are explicitly targeted by this legislation. Beyond product controls, the minimum labeling standard for compliance with this requirement requires the marketer to print one of the following statements, in accordance with the Category claimed, in letters not less than 6.35 mm (1/4 in) in height on the front label of any product marketed under API categories SA and SB:**~~

(Added 2012) (Amended 2014 **and 20XX**)

3.13.1.3.2.a API SA Category. – Warning: This product IS NOT SUITABLE FOR USE IN MOST GASOLINE-POWERED AUTOMOTIVE ENGINES BUILT AFTER 1930.

3.13.1.3.2.b API SB Category: – Warning: This product IS NOT SUITABLE FOR USE IN MOST GASOLINE-POWERED AUTOMOTIVE ENGINES BUILT AFTER 1951.

3.13.1.3.**3. In addition to the minimum labeling standard described in 3.13.1.3.2, marketers shall include the full language expressing Category obsolescence in the latest edition of SAE J183 at time of manufacture.**

3.13.1.3.3.a API SA engine oils should bear the following text on the rear label, in letters not less than 3.18 mm (1/8 in) in height:

CAUTION: THIS OIL IS RATED API SA. IT CONTAINS NO ADDITIVES. IT IS NOT SUITABLE FOR USE IN MOST GASOLINE-POWERED AUTOMOTIVE ENGINES BUILT AFTER 1930. USE IN MODERN ENGINES MAY CAUSE UNSATISFACTORY ENGINE PERFORMANCE OR EQUIPMENT HARM.

3.13.1.3.3.b API SB engine oils should bear the following text on the rear label, in letters not less than 3.18 mm (1/8 in) in height:

CAUTION: THIS OIL IS RATED API SB AND IS NOT SUITABLE FOR USE IN MOST GASOLINE-POWERED AUTOMOTIVE ENGINES BUILT AFTER 1951. USE IN MORE MODERN ENGINES MAY CAUSE UNSATISFACTORY PERFORMANCE OR EQUIPMENT HARM.

3.13.1.4 If a vehicle engine (motor) oil is identified as only meeting an active vehicle or engine manufacturer standard, the labeling requirements in Section 3.13.1.3.1. Vehicle or Engine Manufacturer Standard apply.
(Added 2012) (Amended 2014)

3.13.1.5 For the purposes of this regulation, "Racing oil" refers to motor oil which is intended for use in high-performance engines used in vehicles whose primary function excludes the transport of persons on public roads and highways. The vehicles requiring racing oils are generally race cars, dragsters, hot rods, funny cars and other vehicles modified for racing and/or spectator performance. The engines in such vehicles are often modified from standard OEM production, operated on fuels other than retail gasoline, and/or custom-built, and so Racing Oils are exempt from the requirement of featuring at least one active performance category or OEM credential. However, racing oils shall be labelled with the following cautionary statement, in letters not less than 6.35 mm (1/4 in) in height:

Warning: This product is not recommended for use in gasoline-fueled passenger car engines. It is intended for use in racing applications.

3.13.1.6 Motorcycles, where wet clutches are present in the design, may not operate properly with highly friction-modified engine oils. As a result, motorcycle OEMs may recommend obsolete category oils in an attempt to avoid friction-modified formulations. Frequently, such recommendations are for "API SG" performance levels. All engine oils intended for the motorcycle market, claiming obsolete categories as defined within SAE J183, must be clearly identified "WARNING: For motorcycle use only" on the front label, in letters not less than 6.35 mm (1/4") in height.

3.13.1.6.1. If a vehicle engine (motor) oil is identified as only meeting a vehicle or engine manufacturer standard, the labeling requirements in Section 2.33.1.3.1. Vehicle or Engine Manufacturer Standard apply.

3.13.1.~~6~~7. Tank Trucks or Rail Cars.22T – Tank trucks, rail cars, and other types of delivery trucks that are used to deliver bulk vehicle engine (motor) oil are not required to display the SAE viscosity grade and service category or categories on such tank trucks, rail cars, and other types of delivery trucks. **However, their bill of lading must clearly identify the product present in each compartment so as to satisfy the requirements of 3.13.1.7.**
(Added 2012) (Amend 2013 and 2014)

3.13.1.~~7~~8. Documentation.22T – When the engine (motor) oil is sold in bulk, an invoice, bill of lading, shipping paper, or other documentation must accompany each delivery. This document must identify the quantity of bulk engine (motor) oil delivered as defined in Sections 3.13.1.1. Viscosity; 3.13.1.2. Brand; 3.13.1.3. Engine Service Category; the name and address of the seller and buyer; and the date and time of the sale. For inactive or obsolete service categories **API SA or SB)**, the documentation shall also bear a plainly visible cautionary statement as required in Section 3.13.1.3.2. Inactive or Obsolete Service Categories. Documentation must be retained at the retail establishment for a period of not less than one year.
(Added 2013) (Amended 2014)
(Amended 2012, 2013, and 2014)

3.13.1.4. Tank Trucks or Rail Cars. – Tank trucks, rail cars, and types of delivery trucks that are used to deliver bulk vehicle engine (motor) oil are not required to display the SAE viscosity grade and service category or categories on such tank trucks, rail cars, and other types of delivery trucks.

(Added 2012) (Amend 2013 and 2014)

3.13.1.5. Documentation. – When the engine (motor) oil is sold in bulk, an invoice, bill of lading, shipping paper, or other documentation must accompany each delivery. This document must identify the quantity of bulk engine (motor) oil delivered as defined in Sections 3.13.1.1. Viscosity; 3.13.1.2. Brand; 3.13.1.3. Engine Service Category; the name and address of the seller and buyer; and the date and time of the sale. For inactive or obsolete service categories, the documentation shall also bear a plainly visible cautionary statement as required in Section 3.13.1.3.2. Inactive or Obsolete Service Categories. Documentation must be retained at the retail establishment for a period of not less than one year.

(Added 2013) (Amended 2014)
(Amended 2012, 2013, and 2014)

3.13.2. Labeling of Recreational Motor Oil.

3.13.2.1. Viscosity. – ~~**The label on each container of recreational motor oil shall contain the viscosity grade classification preceded by the letters "SAE" in accordance with the SAE International's latest version of SAE J300, "Engine Oil Viscosity Classification."**~~ **The label on any vehicle engine (motor) oil container, receptacle, dispenser, or storage tank and the invoice or receipt from service on an engine that includes the installation of bulk vehicle engine (motor) oil dispensed from a receptacle, dispenser, or storage tank shall contain the viscosity grade classification preceded by the letters "SAE" in accordance with the SAE International's latest version of SAE J300, "Engine Oil Viscosity Classification." Containers used in retail trade (such as bottles, jugs, pails, drums) are explicitly targeted by this legislation. Where possible in the available space, invoices and receipts shall also display the SAE Viscosity Grade (see Note).**

Note: If an invoice or receipt from service on an engine has limited room for identifying the viscosity, brand, and service category, then abbreviated versions of each may be used on the invoice or receipt and the letters "SAE" may be omitted from the viscosity classification.

3.13.2.2. Intended Use. – The label on each container of recreational motor oil shall contain a statement of its intended use**.** ~~**in accordance with the latest version of SAE J300, "Engine Oil Viscosity Classification."**~~ **Where the intended use is not the lubrication of modern passenger car engines, a cautionary statement warning the consumer that the product is not recommended for typical passenger car engines must appear on the label. Containers used in retail trade (such as bottles, jugs, pails, drums) are explicitly targeted by this legislation. Where possible in the available space, invoices and receipts shall also display the SAE Viscosity Grade (see Note). In particular, monograde products falling under the description of "recreational motor oil" (most commonly for lawn and garden equipment) shall be labelled with the following cautionary statement, in letters not less than 3.18 mm (1/8 in) in height:**

Warning: This product is Generally not recommended for use in gasoline-fueled passenger car engines.

Note: If an invoice or receipt from service on an engine has limited room for identifying the viscosity, brand, and service category, then abbreviated versions of each may be used on the invoice or receipt and the letters "SAE" may be omitted from the viscosity classification

And:

7.2. Reproducibility Limits.

7.2.1. AKI Limits. – When determining the antiknock index (AKI) acceptance or rejection of a gasoline sample, the AKI reproducibility limits as outlined in the latest version of ASTM D4814, "Standard Specification for Automotive Spark-Ignition Engine Fuel, Appendix X1 shall be acknowledged for enforcement purposes.

7.2.2. Reproducibility. – The reproducibility limits of the standard test method used for each test performed shall be acknowledged for enforcement purposes, except as indicated in Section 2.2.1. Premium Diesel Fuel and Section 7.2.1. AKI Limits. No allowance shall be made for the precision of the test methods for aviation gasoline or aviation turbine fuels.

(Amended 2008)

7.2.3. SAE Viscosity Grades for Engine Oils. – All values are critical specifications as defined in the latest version of ASTM D3244, "Standard Practice for Utilization of Test Data to Determine Conformance with Specifications." **All values, with the exception of the low-temperature cranking viscosity, are critical specifications as defined by ASTM D3244 (see text, Section7). ASTM D5293: Cranking viscosity – The non-critical specification protocol in ASTM D3244 shall be applied with a P value of 0.95. ASTM D4684: Note that the presence of any yield stress detectable by this method constitutes a failure regardless of viscosity.** The product shall be considered to be in conformance if the Assigned Test Value (ATV) is within the specification.

(Added 2008)

Background/Discussion: See Appendix A, Page L&R-A13.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

PAL – UNIFORM PACKAGING AND LABELING REGULATION

PAL-2 Section 11.8. Packaged Commodities with Labeling Requirements Specified in Federal Laws. and Appendix C. Reference Information for Packaged Commodities with Labeling Requirements Specified in Federal Laws and Regulations

Source:
NIST OWM (2018)

Purpose:
To update exemptions in the regulation with requirements specified in federal laws and regulations.

Item under Consideration:
Amend NIST Handbook 130 Uniform Regulation for the Uniform Packaging and Labeling Regulation as follows:

> **11.8. Packaged Commodities with Labeling Requirements Specified in Federal Laws and Regulations.** – Packages of alcoholic beverages **(i.e., beer, distilled spirits and wine)**, **cosmetics, catfish (Siluriformes),** meat and meat products, **medical devices, over-the-counter drugs,** poultry products, tobacco and tobacco products, pesticides, and shall be exempt from those portions of these regulations specifying location**, symbols, abbreviations** and minimum type size of the net quantity declaration, provided **net** quantity **of contents and other required** labeling requirements **(i.e., identity, responsibility)** for such products are specified in federal law, **regulation or official guidance** so as to follow reasonably sound principles of providing consumer information. (See also Section 11.32. SI Units, Exemptions - Consumer Commodities **and Appendix C. Reference Information for Packaged Commodities with Labeling Requirements Specified in Federal Laws and Regulations**)

And add new Appendix C as follows:

Appendix C. Reference Information for Packaged Commodities with Labeling Requirements Specified in Federal Laws and Regulations		
Product Agency	**Code of Federal Regulations**	**Net Quantity of Contents Requirements, Guides or Other Information**
Alcoholic Beverages, Wine and Beer **Treasury Department – Alcohol, Tobacco Tax and Trade Bureau.** **www.ttb.gov**	**Title 27, Ch. I, Subchapter A. "Alcohol."**	**Refer to Part 4 "Labeling and Advertising of Wine."** **Refer Part 5 "Labeling and Advertising of Distilled Spirits." See also: The Beverage Alcohol Manual (BAM) A Practical Guide – "Basic Mandatory Labeling Information for Distilled Spirits - Volume 2" at www.ttb.gov/spirits/bam.shtml** **Refer to Part 7 "Labeling and Advertising of Malt Beverages." See also: "The Beverage Alcohol Manual (BAM) A Practical Guide" at www.ttb.gov/beer/bam.shtml**
Animal Food **Food and Drug Administration** **www.fda.gov**	**Title 21 - Food and Drugs. Ch. I - FDA Subchapter E – Animal Drugs, Feeds and Related Products. Part 501 – Animal Food**	**Refer to § 501.105 – "Declaration of net quantity of contents when exempt."**

	Labeling. Subpart F – Exemptions, Animal Food Labeling Requirements.	
Catfish* (Siluriformes) **U.S.D.A.– Food Safety and Inspection Service** **www.fsis.usda.gov**	**Title 9, Ch. III Subchapter F, Part 541 "Marks, Marking and Labeling of Products and Containers."**	**Refer to § 541.7 which incorporates the requirements in Section 9 C.F.R. § 317.2 "Labels: definitions; required features."** ***Fish of the order Siluriformes include, but are not limited to, ''catfish'' (fish of the family Ictaluridae) and ''basa'' and ''swai'' (fish of the family Pangasiidae).**
Cosmetics **Food and Drug Administration** **www.fda.gov**	**Title 21, Ch. I Subchapter G, Part 701 "Cosmetic Labeling"**	**Refer to § 701.13 – "Declaration of net quantity of contents."** **See also: www.fda.gov/Cosmetics/Labeling/default.htm**
Meat & Poultry Products **U.S.D.A.– Food Safety and Inspection Service** **www.fsis.usda.gov**	**Meat and Meat Products:** **Title 9, Ch. III, Subchapter A, Part 317 "Labeling, Marking Devices and Containers"**	**Refer to § 317.2 "Labels: definitions; required features."**
	Poultry: **Title 9, Ch. III Subchapter E, Part 442 – "Quantity of Contents Labeling and Procedures and Requirements for Accurate Weights"**	**Refer to § 442.1 – "Quantity of contents labeling."**
Over-the-Counter Medical Devices **Food and Drug Administration** **www.fda.gov**	**Title 21 - Food and Drugs** **Ch. I - FDA** **Subchapter H – Medical Devices** **Part 801 – Labeling** **Subpart C - Labeling Requirements for Over-the-Counter Medical Devices**	**Refer to § 801.62 - Declaration of net quantity of contents.**
Over-the- Counter Drugs **Food and Drug Administration** **www.fda.gov**	**Title 21, Ch. I Subchapter C - Drugs, Part 201 "Labeling"**	**Refer to § 201.62 "Declaration of Net Quantity of Contents"**

Pesticides **Environmental Protection Agency** **www.epa.gov**	**Title 40, Ch. I, Subchapter E, Part 156 – "Labeling Requirements for Pesticides and Devices," Subpart A, "General Provisions"**	**Refer to § 156.10 "Labeling requirements."** **See also: "Pesticide Registration – Label Review Manual" at** www.epa.gov/pesticide-registration/label-review-manual
Tobacco and Tobacco Products **Food and Drug Administration** **www.fda.gov**	**Section 903 of the Federal Food, Drug, and Cosmetic Act - Misbranded Tobacco Products**	**Since 2009 FDA has regulated all tobacco products, including e-cigarettes, hookah tobacco, and cigars. The exceptions to the UPLR in § 11.5 for "Cuts, Plugs and Twists of Tobacco and Cigars" and § 11.7. for "Cigarettes and Small Cigars" remain in effect as they were based on Treasury Department labeling requirements for smokeless tobacco (chewing tobacco and snuff), and recognize traditional methods of sale of tobacco in cuts, plugs and twists as well as cigars.**
Regulations are codified annually in the *U.S. Code of Federal Regulations* (CFR) online at: www.gpo.gov/fdsys/browse/collectionCfr.action?collectionCode=CFR		

Background/Discussion: See Appendix A, Page L&R-A16.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

MOS – UNIFORM REGULATION FOR THE METHOD OF SALE COMMODITIES

MOS-7 Section 1. Food Products and Section 2. Non-Food Products

Source:
Los Angeles County, California (2016)

Purpose:
Clarify and formalize the long-standing, fundamental, core tenet of legal metrology and weights and measures regulation that the sale of any commodity, in any form or by any method, be according to legally-recognized, traceable units of measure.

Item under Consideration:
Amend NIST Handbook 130 Uniform Regulation for the Method of Sale of Commodities as follows:

Section 1. Food Products

(a) Any food product, whether sold from bulk or in packaged form, shall be sold only in a unit of measure or weight that meets all of the following criteria:

(1) is recognized and defined by NIST as legal for use in commerce

(2) has been published in the "Federal Register"; and

(3) has metrological traceability *(NOTE #, page #)* to a national standard

Note: Sale of a product or commodity according to count, where appropriate to be fully informative to facilitate value comparison, is permissible as a method of sale.

(b) At the discretion of the respective State Director, the following commodities may be exempted from the method of sale limitations set forth in Section 1. (a) and permitted to be sold according to "head" or "bunch," as appropriate:

(1) asparagus;

(2) Brussels Sprouts (on stalk);

(3) rhubarb;

(4) edible bulbs (onions [spring or green], garlic, leeks, etc.);

(5) flower vegetables (broccoli, cauliflower, Brussel sprouts, etc.);

(6) leaf vegetables (lettuce, cabbage, celery, parsley, herbs, loose greens, etc.); and

(7) root vegetables (turnips, carrots, radishes, etc.).

(Added 20XX)

And

Section 2. Non-food Products [***NOTE 1***, page 109]

(a). Any non-food product, whether sold from bulk or in packaged form, shall be sold only in a unit of measure or weight that meets all of the following criteria:

(1) is recognized and defined by NIST as legal for use in commerce

(2) has been published in the "Federal Register"; and

(3) has metrological traceability *(NOTE #, page #)* to a national standard.

Note: Sale of a product or commodity according to count, where appropriate to be fully informative to facilitate value comparison, is permissible as a method of sale.

(b). The only exemptions from the method of sale limitations set forth in Section 2(a) shall be:

(1) Retail sales of compressed natural gas (CNG) sold as a vehicle fuel, which are permitted to be sold in terms of gasoline gallon equivalent (GGE) or diesel gallon equivalent (DGE) as defined, respectively, in Section 2.27.1. Definitions

(2) Retail sales of liquefied natural gas (LNG) sold as a vehicle fuel, which are permitted to be sold in terms of diesel gallon equivalent (DGE) as defined in Section 2.27.1. Definitions.

Note: As defined in NIST Handbook 130, Uniform Weights and Measures Law, Metrological traceability means the property of a measurement result whereby the result can be related to a reference through a documented unbroken chain of calibrations, each contributing to the measurement uncertainty.

(Added 20XX)

Background/Discussion: See Appendix A, Page L&R-A18.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

MOS-8 Section 2.13. Polyethylene Products

Source:
California (2017)

Purpose:
This proposal is to modify the current language to allow for a truncation method for larger non-consumer packages.

Item under Consideration:
Amend the Handbook 130 Uniform Method of Sale of Commodities Regulation as follows:

2.13. Polyethylene Products.

2.13.1. Consumer and Non-Consumer Products. – Offered and exposed for sale shall be sold in the terms given in Section 2.13.1.1. Sheeting and film.

2.13.1.1. Sheeting and Film.

Consumer products shall include quantity statements in both SI and U.S. customary units

Consumer products:

(a) length and width (in SI and U.S. customary units)

(b) area (in square meters and square feet)

(c) thickness (in micrometers and mils [***NOTE 4***, page 117])

(d) weight (in SI and U.S. customary units)

Non-Consumer Products:

(a) length and width (in SI or U.S. customary units)

(b) area (in square meters or square feet)

(c) thickness (in micrometers or mils [***NOTE 4***, page 117])

(d) weight (in SI or U.S. customary units)

(Added 1982) (Amended 1979, 1993, and 1998)

NOTE 4: *1 mil = 0.001 in = 25.4 micrometers (μm). 1 micrometer = 0.000 039 37 in.*
(Amended 1993)

2.13.2. Consumer Products. – At retail shall be sold in the terms given in Section 2.13.2.1. Food wrap, Section 2.13.2.2. Lawn and trash bags, and Section 2.13.2.3. Food and sandwich bags.

2.13.2.1. Food Wrap.

(a) length and width

(b) area in square meters and square feet

(Amended 1979)

2.13.2.2. Lawn and Trash Bags.

(a) count

(b) dimensions

(c) thickness in micrometers and mils

(Amended 1993)

(d) capacity [***NOTE 5***, page 118]

2.13.2.3. Food and Sandwich Bags. – The capacity statement does not apply to fold-over sandwich bags.

(a) count

(b) dimensions

(c) capacity [***NOTE 5***, page 118]

NOTE 5: *See Section 10.8.2. Capacity of the Uniform Packaging and Labeling Regulation*.

2.13.3. Non-consumer Products. – Shall be offered and exposed for sale in the terms given in Section 2.13.3.1. Bags. (Package shall be labeled in SI or U.S. customary units and may include both units.)

(Amended 1998)

2.13.3.1. Bags.

(a) count

(b) dimensions

(c) thickness in micrometers or mils

(d) weight

(e) capacity [***NOTE 5***, page 118]

2.13.4. Declaration of Weight. – The labeled statement of weight for polyethylene sheeting and film products under Sections 2.13.1.1. Sheeting and Film, and 2.13.3.1. Bags, shall be equal to or greater than the weight calculated by using the formula below. The final value shall be calculated to ~~**four**~~ **no more than two** digits **after the decimal and truncate any additional digits** ~~**and declared to three digits, dropping the final digit as calculated**~~ (for example, if the calculated value is **3**2.078 lb, then the declared net weight shall be **3**2.07 lb).

(Added 1977) (Amended 1980, 1982, 1987, 1989, 1990, 1993, ~~**and**~~ 2012**, and 20XX**)

For SI dimensions:

M = T × A × D/1000, where:

M = net mass in kilograms
T = nominal thickness in centimeters
A = nominal length in centimeters times nominal width [***NOTE 6***, page 119] in centimeters
D = minimum density in grams per cubic centimeter as defined by the latest version of ASTM Standard D1505, "Standard Test Method for Density of Plastics by the Density-Gradient Technique" and the latest version of ASTM Standard D883, "Standards Terminology Relating to Plastics."

For the purpose of this regulation, the minimum density (D) for linear low-density polyethylene plastics (LLDPE) shall be 0.92 g/cm^3 (when D is not known).

For the purpose of this regulation, the minimum density (D) for linear medium density polyethylene plastics (LMDPE) shall be 0.93 g/cm^3 (when D is not known).

For the purpose of this regulation, the minimum density (D) for high density polyethylene plastics (HDPE) shall be 0.94 g/cm^3 (when D is not known).

For U.S. customary dimensions:

W = T × A × 0.03613 × D, where:

W = net weight in pounds
T = nominal thickness in inches;
A = nominal length in inches times nominal width [***NOTE 6***, page 118] in inches
D = minimum density in grams per cubic centimeter as defined by the latest version of ASTM Standard D1505, "Standard Test Method for Density of Plastics by the Density-Gradient Technique" and the latest version of ASTM Standard D883, "Standards Terminology Relating to Plastics."

0.03613 is a factor for converting g/cm^3 to lb/in^3

For the purpose of this regulation, the minimum density (D) for linear low-density polyethylene plastics (LLDPE) shall be 0.92 g/cm^3 (when D is not known).

For the purpose of this regulation, the minimum density (D) for linear medium density polyethylene plastics (LMDPE) shall be 0.93 g/cm^3 (when D is not known).

For the purpose of this regulation, the minimum density (D) for high density polyethylene plastics (HDPE) shall be 0.94 g/cm^3 (when D is not known).

(Added 1977) (Amended 1980, 1982, 1987, 1989, 1990, 1993, and 2012)

NOTE 6: *The nominal width for bags in this calculation is twice the labeled width.*

Background/Discussion: See Appendix A, Page L&R-A19.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

MOS-9 D Electric Watthour

Source:
NIST OWM (2016)

Purpose:

1. Make the weights and measures community aware of work being done within the U.S. National Work Group on Electric Vehicle Fueling and Submetering to develop proposed requirements for electric watthour meters used in submeter applications in residences and businesses;

2. Encourage participation in this work by interested regulatory officials, manufacturers, and users of electric submeters.

3. Allow an opportunity for the USNWG to provide regular updates to the S&T Committee and the weights and measures community on the progress of this work;

4. Allow the USWNG to vet specific proposals as input is needed.

Item Under Consideration:
Create a "Developing Item" for inclusion on the NCWM S&T Committee Agenda (and a corresponding item is proposed for inclusion on the L&R Committee Agenda) where progress of the USNWG can be reported as it develops legal metrology requirements for electric watthour meters and continues work to develop test procedures and test equipment standards. The following narrative is proposed for this item:

Background/Discussion: See Appendix A, Page L&R-A20.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

MOS-10 Section 2.XX. – Pet Treats or Chews

Source:
NIST OWM (2018)

Purpose:
There is considerable confusion in the marketplace to how animal treats and bones are to be labeled. This would provide specific guidance to how the package should be labeled.

Item under Consideration:
Amend NIST Handbook 130 Uniform Method of Sale of Commodities Regulation as follows:

2.XX. – Pet Treats or Chews - Digestible chews, rawhides, bones, biscuits, antlers or similar type products that are defined as having nutritional value under FDA and 21 CFR 501 shall be sold by weight.

Background/Discussion: See Appendix A, Page L&R-A22.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

FLR – UNIFORM ENGINE FUELS AND AUTOMOTIVE LUBRICANTS REGULATION

FLR-8 Section 4.1. Water in Retail Engine Fuel Storage Tanks, ~~Gasoline-Alcohol Blends, Biodiesel Blends, Ethanol Flex Fuel, Aviation Gasoline, and Aviation Turbine Fuel.~~ and ~~Section 4.2. Water in Gasoline, Diesel, Gasoline-Ether, and Other Fuels.~~

Source:
State of Colorado (2016)

Purpose:
Provide a consistent best management practice with regard to managing water in any engine fuel utilizing current detection technology.

Item under Consideration:
Amend NIST Handbook 130, Uniform Engine Fuels and Automotive Lubricants Regulation as follows:

4.1. Water in Retail Engine Fuel Storage Tanks ~~Gasoline-Alcohol Blends, Biodiesel Blends, Ethanol Flex Fuel, Aviation Gasoline, and Aviation Turbine Fuel.~~ No water phase greater than 6 mm (¼ in) as determined by an appropriate detection paste or other acceptable means, is allowed to accumulate in any **retail** tank utilized in the storage of **engine fuels including, gasoline,** gasoline-alcohol blend, biodiesel, biodiesel blends, **ultra-low sulfur diesel,** ethanol flex fuel, aviation gasoline, and aviation turbine fuel**, gasoline ether blends, kerosene, or any other engine fuels**.

(Amended 2008, 2012, ~~and~~ 2014**, and 20XX**)

~~**4.2. Water in Gasoline, Diesel, Gasoline-Ether, and Other Fuels. Water shall not exceed 25 mm (1 in) in depth when measured with water indicating paste or other acceptable means in any tank utilized in the storage of diesel, gasoline, gasoline-ether blends, and kerosene sold at retail except as required in Section 4.1. Water in Gasoline-Alcohol Blends, Biodiesel Blends, Ethanol Flex Fuel, Aviation Gasoline, and Aviation Turbine Fuel.**~~

~~**(Amended 2008, 2012, and 2014)**~~

Background/Discussion: See Appendix A, Page L&R-A22.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

FLR-9 G. Uniform ~~Engine~~ Fuels and Automotive Lubricants Regulation

Source:
NCWM Fuels and Lubricants Subcommittee (2018)

Purpose:
Update NIST Handbook 130 Chapter G, Uniform Engine Fuels and Automotive Lubricants Regulation.

Item under Consideration:
Amend NIST Handbook 130, Uniform Engine Fuels and Automotive Lubricants Regulation as follows:

See Appendix B for the complete mark-up of the regulation and background discussion.

Background/Discussion: See Appendix A, Page L&R-A23.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

POL – NCWM POLICY, INTERPRETATIONS AND GUIDELINES

POL-1 Section 2.6.17. Methods of Sale for Packages of Consumer Commodities – Federal Trade Commission and Acceptable Common or Usual Declarations for Packages of Food – Food and Drug Administration.

Source:
NIST OWM (2018)

Purpose:
Provide NIST HB130 users with easy access to tables to identify the method of sales prescribed by the Federal Trade Commission (FTC) for products subject to that agency's regulation and the acceptable common or usual declarations permitted to appear on packages of food by the Food and Drug Administration.

Item under Consideration:
Amend NIST Handbook 130, NCWM Policy, Interpretations and Guidelines as follows:

NOTE: NIST/OWM is also requesting editorial privileges to add items as they receive confirmation from FDA as to what the acceptable common or usual declaration for a product is. NIST/OWM will then automatically update the handbook (chart) and list all changes to the Amendment chart located in the front HB130.

2.6.17. Methods of Sale for Packages of Consumer Commodities – Federal Trade Commission and Acceptable Common or Usual Declarations for Packages of Food – Food and Drug Administration.

Section 2.6.17 Table A. Acceptable Common or Usual Net Quantity of Contents Declarations on Packages of Food		
Product	**Acceptable Common or Usual Declaration**	**Notes**
Abalone, Canned in Brine	Net Weight	
Apples, Fresh	Dry Measure or Net Wt. In addition, may also show min. size, range in size, and/or count	
Anchovies (in salt)	Weight of Fish	
Apricots, canned	Net Weight	
Artichokes, canned	Drained Weight	
Asparagus, fresh	Net Weight or No Marking	
Beans, fresh	Dry Measure or Net Weight	
Berries, small open containers	No marking, Dry Measure on cellophane covered	
Biscuits	Net Weight and Count	

Section 2.6.17 Table A. Acceptable Common or Usual Net Quantity of Contents Declarations on Packages of Food		
Product	**Acceptable Common or Usual Declaration**	**Notes**
Bloaters, smoked	Weight of Fish	
Bread	Net Weight	
Cabbage, fresh	Dry Measure or Net Weight	
Cake (decorations)	No markings	
Cantaloupes, fresh	Count	
Catsup	Net Weight	
Celery, fresh	Count	
Cereals	Net Weight	
Cheese (general)	Net Weight	
Cheese (limburger)	Net Weight	
Cherries, canned	Net Weight	
Cherries, maraschino	Net Weight or Dry Measure, No. of rows and minimum size	
Chicken, canned	Net Weight	
Chili sauce	Net Weight	
Citrus fruit (fresh)	Dry Measure	
Chow Chow	Net Weight	
Citrus juices	Fluid Ounces	
Clams, canned	Drained Weight	
Cocktail sauce	Net Weight	
Cookies (cakes)	Net Weight and Count	
Corn on Cob (canned)	Count	
Cottonseed meal	Net Weight	
Crabmeat, canned (dry)	Net Weight	
Crabmeat in brine	Dry Weight	
Crackers	Net Weight	
Cranberries	Dry Measure (cranberry barrel) also Net Weight	
Dates	Net Weight	
Doughnuts	Net Weight and Count	
Fish, canned	Net Weight	
Fish, fresh	No marking, Net Weight	
Fish, frozen	Net Weight, No marking	
Fish, salted or smoked	Net Weight and Count	

Section 2.6.17 Table A. Acceptable Common or Usual Net Quantity of Contents Declarations on Packages of Food		
Product	**Acceptable Common or Usual Declaration**	**Notes**
Fruits, canned	Net Weight	
Fruits, fresh	Dry Measure or Net Weight, also min size and/or count	
Fruit juices	Net Volume	
Grains, sacked	Net Weight	
Grapefruit, fresh	Dry Measure, Size & Count, also Net Weight	
Grapes, fresh	Net Weight & Dry Measure	
Greens, fresh	Dry Measure & Net Weight, also No marking	(See Section 2.3.2 Fresh Fruits and Vegetables)
Gum	Number of Sticks	
Herring Roe	Net Weight	
Herring, spiced	Drained Weight Herring, Total Weight Contents	
Honey, comb	Net Weight	
Honey, strained	Net Weight	
Jelly	Net Weight	
Lemons, fresh	Count & Average Diameter, also Dry Measure	
Lettuce	Dozen Count & Dry Measure	
Lobster, canned (dry)	Net Weight	
Lobster meat in brine (cooked)	Drained Weight	
Margarine	Net Weight	
Mayonnaise	Net Weight	
Meats	Net Weight	
Microgreens	Net Weight	FDA Email to OWM 11/4/14
Milk, sweetened, condensed	Net Weight	
Milk, evaporated	Volume (Net Weight, may be declared on side panel (s))	
Molasses	Net Weight and/or Volume	
Mushrooms, fresh	Net Weight	
Mushrooms, canned	Drained Weight	
Mussels (canned)	Drained Weight	
Mustard, prepared	Net Weight	
Oil, salad, olive	Volume	
Olives, green (in brine)	Drained Weight	

Section 2.6.17 Table A. Acceptable Common or Usual Net Quantity of Contents Declarations on Packages of Food		
Product	**Acceptable Common or Usual Declaration**	**Notes**
Olives, ripe	Drained Weight	
Oranges	Dry Measure & Count, also Net Weight & Size	
Oysters, fresh	Volume	
Oysters, canned	Drained Weight	
Peaches, canned	Net Weight	
Peaches, fresh	Dry Measure, Min. Diameter, also Net Weight & Count	
Peanut, butter	Net Weight	
Pears, canned	Net Weight	
Peas, canned	Net Weight	
Pickles	Volume	
Pineapple, fresh	Count	
Plums, prunes, fresh	Net Weight or Dry Measure, Count & Size denoted by rows in top layer	
Potatoes, fresh	Net Weight or Dry Measure	
Rabbits, dressed	Net Weight	
Rolls	Net Weight and Count	
Relish	Net Weight	
Rock Lobster, canned (dry)	Net Weight	
Roe, herring	Net Weight	
Salad dressing	Volume	
Salmon, canned	Net Weight	
Sardines, canned	Net Weight	
Sauces, Hot, Tabasco, A-1, etc.	Volume	
Sauerkraut, (unprocessed in glass)	Volume	
Shrimp, canned (wet)	Drained Weight	
Shrimp, canned (dry)	Net Weight	
Syrup	Volume & Net Weight	
Soups, canned (liquid single strength)	Net Volume	
Soups, canned (condensed & semi-condensed)	Net Weight	
Spaghetti sauce	Net Weight	
Tea	Net Weight	

Section 2.6.17 Table A. Acceptable Common or Usual Net Quantity of Contents Declarations on Packages of Food		
Product	**Acceptable Common or Usual Declaration**	**Notes**
Tea bags	Net Weight & Count	
Toddler Food (e.g., ravioli and vegetables in a single tray.)	Net Weight	FDA Email to OWM 9/20/17
Tomatoes, canned	Net Weight	
Tomatoes, fresh	Net Weight or Dry Measure, Size denoted by Rows in top layer	
Tomato sauce	Net Weight	
Tuna fish, canned	Net Weight or, Drained Weight*	*Several packers have permission to temporarily label by drained weight. See page 35362 Federal Register / Vol. 79, No. 119 / Friday, June 20, 2014 / Notices – "FDA - Canned Tuna Deviating from Identity Standard;"
Vegetables, canned	Net Weight	
Vegetables, fresh	Dry Measure or Net Weight, also Count	
Water, infused	Fluid Volume	FDA Email to OWM 5/24/17
Yogurt, drinkable	Fluid Volume	FDA Email to OWM 5/24/17
This compilation will be revised from time to time as may be required by changes in consumer understanding, administrative opinion, or court decisions.		

Section 2.6.17. Table B. Method of Sale – Federal Trade Commission

The Net Quantity Declaration designated in this chart is that one used on the most common form of packaging for each commodity. If the product is packaged in multiple units or with other commodities, see "Multi-Unit Package," "Variety Package," or "Combination Package," as appropriate. As noted below the Uniform Regulation for the Method of Sale of Commodities (UMSCR) also includes methods of sale for several products or commodities. Additional detail on labeling requirements is also contained in the Uniform Packaging and Labeling Regulation (UPLR).

Product or Commodity	**Net Quantity of Contents Declaration**
Aerosol Containers	Net Weight (See also Section 10.3 "Aerosols and Other Pre-Pressurized Containers Dispensing Product under Pressure" in the UPLR).
Air Freshener	

Section 2.6.17. Table B. Method of Sale – Federal Trade Commission

The Net Quantity Declaration designated in this chart is that one used on the most common form of packaging for each commodity. If the product is packaged in multiple units or with other commodities, see "Multi-Unit Package," "Variety Package," or "Combination Package," as appropriate. As noted below the Uniform Regulation for the Method of Sale of Commodities (UMSCR) also includes methods of sale for several products or commodities. Additional detail on labeling requirements is also contained in the Uniform Packaging and Labeling Regulation (UPLR).

Product or Commodity	Net Quantity of Contents Declaration
Aerosol	Net Weight
Liquid	Fluid Measure
Cake	Net Weight
Aluminum Foil	
Cooking & Bakeware	Count and inside dimensions (length, width, and depth, or diameter and depth). Depth of less than 5 cm (2 in) and capacity are optional. (See also Section 10.8. Measurement of Container-Type Commodities – How Expressed in the UPLR).
Wrap	*See Food Wraps*
Bags	
Garbage, Trash, Food Storage, Leaf, Lunch, etc.	Count and dimensions (width and length for non-gusseted; width, depth, and length for gusseted). Capacity is optional. (See also Section 2.13. "Polyethylene" in the UMSCR).
Vacuum Cleaner, Disposable	Count. (Make and model of vacuum for which intended and name and place of business must appear on the principal display panel.)
Bathmats, paper	Count and dimensions (length and width in millimeters or centimeters and inches).
Bathroom Tissue	Total square meters and square feet, number of rolls (if more than one), number of tissues per roll, ply, plus length and width of each tissue in centimeters and inches.
Batteries, Household	Count. (Voltage and/or size are factors of identity, *not* quantity.)
Bed Sheet, Paper	Dimensions (length and width of finished item in millimeters or centimeters and inches).
Bowls (Paper Foil, Plastic, etc.)	Count and dimensions. (Depth and diameter (outer top rim) in inches.) Depth of less than 5 cm (2 in) and capacity are optional.

Section 2.6.17. Table B. Method of Sale – Federal Trade Commission

The Net Quantity Declaration designated in this chart is that one used on the most common form of packaging for each commodity. If the product is packaged in multiple units or with other commodities, see "Multi-Unit Package," "Variety Package," or "Combination Package," as appropriate. As noted below the Uniform Regulation for the Method of Sale of Commodities (UMSCR) also includes methods of sale for several products or commodities. Additional detail on labeling requirements is also contained in the Uniform Packaging and Labeling Regulation (UPLR).

Product or Commodity	Net Quantity of Contents Declaration
Boxes, Food Storage	Count and dimensions (length, width and depth). Capacity is optional. (See also Section 10.8. Measurement of Container-Type Commodities – How Expressed in the UPLR).
Bulb, Light	Count, if more than one. Voltage, wattage, lumens, size, etc., are factors of identity, *not* quantity.
Butane Fuel	Net Weight
Calking Compounds	Fluid Measure
Candle	
Uniform Width or Diameter	Dimensions (length and diameter or width, in millimeters or centimeters and inches).
Tapered or irregularly shaped figures, numbers, etc.	Length or height in millimeters or centimeters and inches. (diameter need not be expressed – See also 16 C.F.R. § 501.7)
Chamois	
Full Skin (shape of the animal)	Total square meters and square feet
Cut Skin (Square, Rectangular, or Pocket)	Total square meters and square inches, followed in parentheses by square feet if more than one square foot.
Charcoal Briquets	Net Weight
Christmas Decorations	
Balls	*See Ornaments*
Bulbs	*See Bulb, Light*
Garlands	*See Garlands*
Icicles or Tinsel	Count, plus length of strands
Ornaments	*See Ornaments*
Cigarette Paper	Count
Cleaning Compound	
Liquid	Fluid Measure
Powder, Cake, or Paste	Net Weight

Section 2.6.17. Table B. Method of Sale – Federal Trade Commission

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Product or Commodity	Net Quantity of Contents Declaration
Clothesline	*See Cordage*
Combination Package	Count, weight volume, dimensions, or a combination thereof, for each commodity included. (See also Section 10.5. "Combination Packages" in the UPLR.
Cooking and Bakeware Containers (Foil and Paper	*See Aluminum Foil*
Cordage	Length in meters and feet (followed in parentheses by length in yards). Ply and diameter are optional. (Breaking strength and size designation are elements of identity.)
Cups	
Drinking	Count, plus fluid capacity (See also Section 10.8.3 Terms in the UPLR regarding the optional use of terms such as "fluid" with the capacity declaration.)
Nut and Party	Count, plus dimensions (top outside diameter, or length and width). Capacity is optional.
Cooking and Baking (Foil or Paper)	Count and inside dimensions (diameter and depth). Depth of less than 5 cm (2 in) and capacity are optional.
Deodorizer	
Aerosol	Net Weight
Liquid	Fluid Measure
Cake	Net Weight
Detergent	
Liquid	Fluid Measure
Powder, Cake, or Granular	Net Weight
Diapers, Disposable	Count and dimensions (length and width in millimeters or centimeters and inches). Dimensions may be omitted if diaper is in permanent pre-fold or form-fitted shape.
Distilled Water	Fluid Measure

Section 2.6.17. Table B. Method of Sale – Federal Trade Commission

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Product or Commodity	Net Quantity of Contents Declaration
Doilies, Paper	Count, plus dimensions (length and width, or diameter in millimeters or centimeters or inches).
Drop Cloth (Plastic)	Total square meters and square feet, plus length and width in the largest whole unit measurements.
Dyes and Tints (Household)	
Powder	Net Weight
Liquid	Fluid Measure
Emory Cloth (Paper	*See Sandpaper*
Eyeglass Tissue	Count
Facial Tissue	Count, ply, plus length and width of each tissue in millimeters or centimeters and inches.
Film	
Bulk or Movie	(See also Section 11.22. "Camera Film, Recording Tape, Audio Recording Tape and Other Image and Audio Recording Media Intended for Retail Sale and Consumer Use" in the UPLR). Number of meters or feet of usable film only.
Still	Number of exposures. Length and width of individual exposures in millimeters and inches are optional.
Filters, Coffee	Count and dimensions (length and width, or diameter).
Fireplace Wood (See Section 2.4 in UMSCR)	
Cord Wood (Packaged)	Cubic feet and liters (See 2.4. "Fireplace and Stove Wood" in the UMSCR.)
Compressed Log	Net Weight
Flints, Lighter	Count
Food Storage	
Bags	*See Bags*
Boxes	*See Boxes, Food Storage*

Section 2.6.17. Table B. Method of Sale – Federal Trade Commission

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Product or Commodity	Net Quantity of Contents Declaration
Food Wrap (Plastic, Paper, Foil, etc.) (See Section 6.9. "Bi-dimensional Commodities" in the UPLR).	Total square meters and square feet, plus length and width in largest whole measurement. (See also Section 6.9. Bi-Dimensional Commodities in the UPLR.)
Fuses, Household	Count (if more than one). Amperage, type, voltage, size, etc., are factors of identity, *not* net quantity.
Garden Bags	*See Bags*
Garlands	Length in meters and feet (followed in parentheses by yards). Ply and/or width in inches are optional.
Glasses, Disposable	Count, plus fluid capacity of each glass.
Glue	
Liquid	Fluid Measure
Powdered	Net Weight
Grease, Household	*See Lubricants, Household*
Incense	Count
Laundry Supplies	
Liquid	Fluid Measure
Aerosol	Net Weight
Powder or Solid	Net Weight
Leaf Bags	*See Bags*
Light Bulbs	*See Bulbs, Light*
Lighter Fuel	
Non-pressurized	Fluid Measure
Pressurized (e.g., Butane)	Net Weight
Logs, Compressed	*See Fireplace Wood*
Lubricants, Household	
Liquid (Oil)	Fluid Measure
Powder, Paste, Solid, Semi-Solid, etc.	Net Weight
Lunch Bag	*See Bags*

Section 2.6.17. Table B. Method of Sale – Federal Trade Commission

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Product or Commodity	Net Quantity of Contents Declaration
Matches	
Wooden (Kitchen, Fireplace, etc.)	Count plus length if they are extra-long intended for fireplace use, etc.
Book-Matches (By the Box)	Count (number of books, number of matches per book, total number of matches).
Mucilage	Fluid Measure
Multi-Unit Package	Count, plus weight, measure, or volume for each unit, followed by the total weight, measure, or volume, as appropriate. (See also Section 10.4. "Multiunit Packages" in the UPLR.
Napkins, Paper	Count, ply, plus length and width of each napkin in inches.
Oil, Household	*See Lubricants, Household*
Ornaments, Christmas	Opaque package – count and dimensions. Count only, if ornaments are clearly visible to retail purchaser at time of purchase. (See 16 C.F.R. § 501.2)
Paper: Crepe, Shelf, or Wrapping (Not Gift Wrap)	Total square area, plus length and width in largest whole measurements.
Paper Streamers	*See Tape*
Paste, Household	Fluid Measure
Patching Plaster	Net Weight
Pillow Case, Paper	Dimensions (length and width of finished item in centimeters and inches only).
Pipe Cleaners	Count. Length for cleaners shorter or longer than the standard 152.4 mm (6 inches).
Place Mats, Paper	Count and dimensions (length and width in centimeters and inches only).
Plastic Food Wrap	*See Food Wraps*
Plates, Disposable	Count and outside dimensions (length and width or diameter, in centimeters and inches).
Polish Cloth, Impregnated	Dimensions (total square area plus length and width in the largest whole measurements).

Section 2.6.17. Table B. Method of Sale – Federal Trade Commission

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Product or Commodity	Net Quantity of Contents Declaration
Polish	
Liquid	Fluid Measures
Aerosol	Net Weight
Powder, Granule, Cake, or paste	Net Weight
Propane Fuel	Net Weight
Rope, Household	*See Cordage*
Rubber Bands	Net Weight
Sandpaper (Fine, Medium, or Coarse, Grit, Etc.)	
One Grit Only (Fine, Medium or Coarse)	Count and dimensions of each sheet (length and width in centimeters and inches).
Assorted Grits	
a. .....Sheet Count for Each Type of Grit is Constant.	Count of sheets per each type of grit, dimensions of each sheet (length and width in centimeters and inches), plus total sheet count.
b. .....Total Sheet Count is Constant, but Sheet Count for Each Type of Grit Varies from Package to Package.	Count and dimensions of each sheet (length and width in centimeters and inches). Identity must include term, "Assorted Miscellaneous Grits."
Scouring Pads	
Steel Wool, Metal Coil, Plastic, Etc.	Count plus dimensions (length, width and depth in centimeters and inches) for rectangular or square shaped pads.
Soap	
Powder, Flake, Chip, Poufs, Cake, Ball, etc.	Net Weight
Liquid	Fluid Measure
Solder	Net Weight in only. Percentage of composition, diameter, and core size are factors of identity *not* quantity. For Solder containing precious metals see 16 C.F.R. § 501.8 "Solder." Solder and brazing alloys containing precious metals when packaged and labeled for retail sale are exempt from the net

Section 2.6.17. Table B. Method of Sale – Federal Trade Commission

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Product or Commodity	Net Quantity of Contents Declaration
	quantity statement requirements of part 500 of this chapter which specify that all statements of weight shall be in terms of avoirdupois pound and ounce provided the net quantity declaration is stated in terms of the troy pound and ounce and the term troy is used in each declaration.
Solder Flux	
Liquid	Fluid Measure
Paste	Net Weight
Spackling Compound	Net Weight
Sponge (Cellulose, Rubber, etc.)	
Standard Shapes	Dimensions (length, width and thickness or diameter and thickness, in centimeters and inches).
Irregular Dimensions	Count, followed by the phrase "Irregular dimensions."
Steel Wool, for finishing and polishing pads	Count. Total net weight is optional.
Straws, Drinking	Count and length. Inside diameter is optional.
String	*See Cordage*
Table Cover, Paper	Dimensions (length and width in centimeters and inches).
Tableware (Plastic Cutlery)	Count (also see Variety Package)
Tape	Dimensions (width in centimeters and inches followed by length in largest whole measurement (e.g., meters and yards.)
Tissue	*See Bathroom Tissue and Facial Tissue*
Toothpicks	Count
Towels, Paper	
Roll	Total square meters and square feet, roll count (if more than one), number of towels per roll, ply, length and width of individual

Section 2.6.17. Table B. Method of Sale – Federal Trade Commission

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Product or Commodity	Net Quantity of Contents Declaration
	towels in centimeters and inches.
Single	Dimensions (length and width in centimeters and inches.)
Trash Bags	*See Bags*
Twine	*See Cordage*
Vacuum Cleaner Bags	*See Bags*
Variety Package	Weight, volume, measure and count, as appropriate, for each identical commodity, followed by total statement of quantity, as appropriate. (See also Section 10.6. "Variety Packages" in the UPLR.)
Water, Distilled	Fluid Measure
Wax Paper	*See Food Wraps*
Wax	
Liquid	Fluid Measure
Aerosol	Net Weight
Paste, Cake, and Powder	Net Weight

Background/Discussion: See Appendix A, Page L&R-A24.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

NET – HANDBOOK 133

NET-2 1.2.6.1. Applying Moisture Loss

Source:
Connecticut (2018)

Purpose:
To provide guidance that would enable inspectors to meet the requirement of allowing "reasonable moisture loss" while also allowing impacted commodity manufacturers to submit materials to NCWM if an additional percentage is desired.

Item under Consideration:
Amend NIST Handbook 133 as follows:

1.2.6.1. Applying a Moisture Allowance

Some packaged products may lose or gain moisture and, therefore, lose or gain weight or volume after packaging. The amount of moisture loss depends upon the nature of the product, the packaging material, the length of time it is in distribution, environmental conditions, and other factors. Moisture loss may occur even when manufacturers follow good distribution practices. Loss of weight "due to exposure" may include solvent evaporation, not just loss of water. For loss or gain of moisture, the moisture allowances may be applied before or after the package errors are determined.

To apply an allowance before determining package errors, adjust the Nominal Gross Weight (see Section 2.3.6. "Determine Nominal Gross Weight and Package Errors"), so the package errors are increased by an amount equal to the moisture allowance. This approach is used to account for moisture loss in both the average and individual package errors.

It is also permissible to apply the moisture allowances after individual package errors and average errors are determined.

Example:
A sample of a product that could be subject to moisture loss might fail because the average error is minus or the error in several of the sample packages are found to be unreasonable errors (i.e., the package error is greater than the Maximum Allowable Variation (MAV) permitted for the package's labeled quantity).

You may apply a moisture allowance after determining the package errors by adding the allowance to the Sample Error Limit (SEL) and then, comparing the average error to the SEL to determine compliance. The moisture allowance must be added to the MAV before evaluating sample errors to identify unreasonable minus errors**.**

(Amended 2010)

This handbook provides "moisture allowances" for some meat and poultry products, flour, pasta, and dry pet food. (See Chapter 2, Table 2-3. "Moisture Allowances") These allowances are based on the premise that when the average net weight of a sample is found to be less than the labeled weight, but not by an amount that exceeds the allowable limit, either the lot is declared to be within the moisture allowance or more information must be collected before deciding lot compliance or noncompliance.

In the event that a pre-existing moisture allowance, submitted and accepted by the National Conference on Weights and Measures, does not exist for such product, e.g., product packed in a permeable package that potentially would gain or lose moisture over the course of the product life, assuming a good

distribution system, the manufacturer may be asked to submit such evidence of moisture loss or gain. In the event that the manufacturer does not reply or such data does not exist the inspector may use a coefficient of 1.5% as a surrogate for submitted data on moisture loss.
(Added 20XX)

Test procedures for flour, some meat, and poultry are based on the concept of a "moisture allowance" also known as a "gray area" or "no decision" area (see Section 2.3.8. "Moisture Allowances"). When the average net weight of a sample is found to be less than the labeled weight, but not more than the boundary of the "gray area," the lot is said to be in the "gray" or "no decision" area. The gray area is not a tolerance. More information must be collected before lot compliance or noncompliance can be decided. Appropriate enforcement should be taken on packages found short weight and outside of the "moisture allowance" or "gray area."

(Amended 2002)

Background/Discussion: See Appendix A, Page L&R-A25.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

NET-3 4.XX. Softwood Lumber

Source:
NIST OWM (2018)

Purpose:
Provide inspectors and industry with a HB133 uniform test method for softwood lumber.

Item under Consideration:
Amend NIST Handbook 133 as follows:

4.XX. Softwood Lumber

4.XX.1. Test Equipment

- **304 mm (12 in) caliper with 0.01 mm (0.0005 in) graduations (or digital equivalent) for labeled dimensions up to 304 mm (12 in).**
- **Set of precision gage blocks.**
- **For labeled dimensions exceeding 304 mm (12 in), a steel linear measure with 1 mm ($^1/_{16}$ in or 0.062 in) graduations.**
- **Calculator**
- **Dimensional Lumber Worksheet**
- **Wood moisture meter (e.g., a meter equipped with a probe with dual-probes and a hammer head handle for inserting the probes into the sample and that can have the moisture values manually or automatically corrected for different species of wood.)**
- **The latest version of U.S. Department of Commerce (DOC), Voluntary Product Standard PS 20 "American Softwood Lumber Standard.**"

4.10.2. Test Procedure

This procedure may be used to verify the width, length, and thickness of regularly shaped dimensional lumber. Software lumber is generally represented by both the nominal dimension and the minimum dressed sizes. Testing is based on the minimum dressed sizes for both unseasoned (green) and dry lumber as found in the latest version of the U.S. DOC, Voluntary Product Standard PS 20 "American Lumber Softwood Standard." Lumber substitutes (i.e., composite) are not covered under PS 20 and must be labeled by actual dimensions.

NOTE: Lumber substitutes must be labeled by their actual dimensions.

1. **Follow Section 2.3.1. "Define the Inspection Lot." Use a "Category A" sampling plan in the inspection; select a random sample.**

    a. **The lot must be sorted by like items (i.e., species, grade, dry) including dimensions and mill number. Identify the nominal size of each piece (e.g., 38 mm × 89 mm [2 in × 4 in], 38 mm × 286 mm [2 in × 12 in], or 19 mm × 140 mm [1 in × 6 in]) and the minimum dressed size (from U.S. DOC, Voluntary Product Standards PS-20).**

    b. **Remove any outer pieces (top, sides) that have been exposed to the elements (e.g., weather, rain, moisture, sun) from the lot.**

2. **Set up in an area away from foot traffic or material moving equipment. Place the piece of wood to be measured on a solid flat surface.**

3. **Verify the accuracy of the calipers using the gage blocks. Use the calipers to measure thickness and width and record the actual dimensions on the "Worksheet for Softwood Lumber".**

    a. **For commodities labeled 3 m (10 ft) or less in length, take a minimum of three measurements across the thickness and three measurements across the width. Measurements should be evenly spaced at equal intervals (i.e., at locations approximately ¼, ½, and ¾ across the thickness and width). Calculate the average thickness and width measurement of each piece of wood.**

    b. **For commodities labeled greater than 3 m (10 ft) in length, take one additional measurement per every additional 1.8 m (6 ft) or portion thereof.**

    Note: Do not take measurements within 150 mm (6 in) from the ends or in areas where the lumber has a knot or damage would affect the measurement.

4. **Use a steel linear measure to determine the length of the piece of wood and record the actual length on the worksheet.**

    a. **Take a minimum of three measurements across the length. Measurements should be evenly spaced at equal intervals (i.e., at locations across the length at approximate intervals of ¼, ½, and ¾ distance). Calculate the average length measurement of each piece of wood.**

    Note: Do not take measurements in areas where the lumber has a knot or damage, which would affect the measurement.

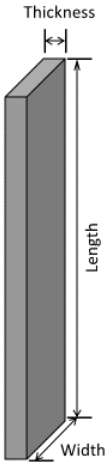

Figure 1. Example of lumber dimensions measured.

4.10.3. Shrinkage Allowance

Lumber is a product that shrinks and swells with changes in moisture content. The size of the lumber changes approximately 1 % for each 4 % change in moisture content.

4.10.3.1. Dry Lumber

The latest version of U.S. DOC, Voluntary Product Standard PS 20 defines dry lumber as being 19 % or less in moisture content.

1. **Compare the actual dimensions of thickness, width, and length of each piece to the minimum dressed sizes in NIST Handbook 130, "Uniform Regulation for the Method of Sale of Commodities" Table 1. "Softwood Lumber Sizes" and record the differences as errors on the worksheet.**

2. **Calculate the average errors for thickness, width and length. You can exceed the dressed size for the nominal value for an individual piece.**

3. **If the average error is a minus value, perform a moisture test on each piece using a wood moisture meter.**

   a. **If the moisture content of the piece is 19 %, the sample piece fails. No moisture loss allowance is provided.**

   b. **If the moisture content of the piece is between 15 % to 19 %, allow an additional 1 % for shrinkage in each dimension. (Allow 0.7 % for shrinkage for Redwood, Western Red Cedar, and Northern White Cedar).**

      If the moisture content of the piece is between 10 % to 14 %, allow an additional 2 % for shrinkage in each dimension. (Allow 1.4 % for shrinkage for Redwood, Western Red Cedar, and Northern White Cedar).

      If the moisture content is less 10 %, continue to apply additional shrinkage factor as referenced above.

4.10.3.2. Unseasoned (Green) Lumber

The latest version of the U.S. DOC Voluntary Product Standard PS 20 defines unseasoned (green) lumber as being over 19 % in moisture content.

1. **Compare the actual dimensions of thickness, width, and length of each piece to the minimum dressed sizes in NIST Handbook 130, "Uniform Regulation for the Method of Sale of Commodities" Table 1. "Softwood Lumber Sizes" and record the differences as errors on the worksheet.**

2. **Calculate the average errors for thickness, width and length. You can exceed the dressed size for the nominal value for an individual piece.**

3. **If the average error is a minus value, perform a moisture test on each piece.**

   a. **If the moisture content of the piece is greater than 30 % the sample piece fails. No moisture allowance is provided.**

   b. **If the moisture content of the piece is 26 % to 30 % moisture, allow 1 % for shrinkage in each dimension.**

      Allow additional 2 % for shrinkage in each dimension for pieces with a 21 % to 25 % moisture content. (Allow 1.4 % for shrinkage for Redwood, Western Red Cedar, and Northern White Cedar).

      Continue to apply a 1 % shrinkage for every 4 % loss in moisture, continue to apply additional shrinkage factor as referenced above.

4.10.4. Evaluation of Results

1. **To determine lot conformance, return to Section 2.3.7. "Evaluate for Compliance".**
2. **If the sample pieces do not meet the average and MAV requirement based on the minimum dressed sizes after the shrinkage (moisture) allowances are considered, the lot fails. Place the Inspection Lot on hold.**

   ***Inspectors should notify the American Lumber Standard Committee (ALSC) of any lots that fail compliance. ALSC may be able to provide further evaluation.**

   American Lumber Standard Committee, Inc.
   7470 New Technology Way, Suite F.
   Frederick, MD 21703
   301-972-1700 or 301-540-8004
   E-mail: alsc@alsc.org
   URL: www.alsc.org

Worksheet for Softwood Lumber								
Product:			**Manufacturer/Mill Number**					
Labeled Dimensions			**Address:**		**City/State/Zip**			
Length								
Width			**Brand/Grade/Surface**		**Testing Location:**			
Thickness								
Piece Number	**Average Length**	**Average Width**	**Average Thickness**		**Piece Number**	**Average Length**	**Average Width**	**Average Thickness**
1.					**7.**			
Error					**Error**			
2.					**8.**			
Error					**Error**			
3.					**9.**			
Error					**Error**			
4.					**10.**			
Error					**Error**			
5.					**11.**			
Error					**Error**			
6.					**12.**			
Error					**Error**			
Total Average								
Average Error								

Table 2-8 MAV for Packages Labeled by Length, Width or Area

1 m (1 YD) or less is 3 % of labeled quantity

More than 1 m (1 YD) to 43 m (48 YD) is 1.5 % of labeled quantity

Section 1. Compliance with Maximum Allowable Variation

1. Calculate the MAV for labeled thickness = _____. Do any of the minus errors for thickness exceed the MAV?
a. If yes, go to Section 5.
b. If no, go to Section 2.

2. Calculate the MAV for length = _____. Do any of the minus errors for width exceed the MAV?
a. If yes, go to Section 5.
b. If no, go to Section 3.

3. Calculate the MAV for labeled width = _____. Do any of the minus errors for length exceed the MAV?
a. If yes, go to Section 5.
b. If no, go to Section 4.

Section 2. Compliance with the Average Requirement – Thickness

4. Calculate the Average Error for labeled thickness _____. The sample passes this requirement if the Average Error is zero or a positive number. Go to Section 3. If the Average Error is a negative number, go to Step 5.

5. Calculate the Sample Standard Deviation (*s*) and multiply (*s*) by the Sample Correction Factor (*SCF*) for the sample size to obtain the Sample Error Limit (*SEL*). Go to Step 6.

*(s)*_____ × (*SCF*) _____ = *SEL* _____

6. Disregarding the signs, is the *SEL* in Step 5 larger than the Average Error in Step 4? If yes, the lot passes on thickness. If no, go to Section 3.

Section 3. Compliance with the Average Requirement – Length

7. Calculate the Average Error for labeled length_____. The sample passes this requirement if the Average Error is zero or a positive number. Go to Section 4. If the Average Error is a negative number, go to Step 8.

8. Calculate the Sample Standard Deviation (*s*) and multiply (*s*) by the Sample Correction Factor (*SCF*) for the sample size to obtain the Sample Error Limit (*SEL*). Go to Step 9.

*(s)*_____ × (*SCF*) _____ = *SEL* _____

9. Disregarding the signs, is the *SEL* in Step 8 larger than the Average Error in Step 7? If yes, the lot passes on length. If no, go to Section 4.

Section 4. Compliance with the Average Requirement – Width

10. Calculate the Average Error for labeled width _____. The sample passes this requirement if the Average Error is zero or a positive number. Go to Section 6. If the Average Error is a negative number, go to 11.

11. Calculate the Sample Standard Deviation (*s*) and multiply (*s*) by the Sample Correction Factor (*SCF*) for the

sample size to obtain the Sample Error Limit (*SEL*). Go to Step 12.

*(s)*_____ × (*SCF*) _____ = *SEL* _____

12. Disregarding the signs, is the *SEL* in Step 11 larger than the Average Error in Step 10? If yes, approve the lot. If no, go to Section 5.

Section 5. Determine Shrink Allowance

If the average error for any dimension (thickness, length, width) is a minus value, or if the MAV is exceeded for any package, perform a moisture test on each piece to determine if a shrinkage allowance should be applied. Apply the appropriate allowance to each piece, then re-calculate the average error and re-determine compliance with the MAV.

Piece Number	Moisture Content	Shrinkage Allowance		Piece Number	Moisture Content	Shrinkage Allowance
1.				**7.**		
2.				**8.**		
3.				**9.**		
4.				**10.**		
5.				**11.**		
6.				**12.**		

Section 6. Action Taken: ☐ Lot Rejected ☐ Lot Approved

Comments:	**Official Name/Signature**
	Date:

Random Numbers: enter the numbers as you select them in the top row and reorder them in the bottom row.

Background/Discussion: See Appendix A, Page L&R-A26.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

NET-4 4.XX. Plywood and Wood-Based Structural Panels

Source:
NIST OWM (2018)

Purpose:
Provide inspectors and industry with a HB133 uniform test method for Plywood and Wood-Based Structural Panels.

Item under Consideration:
Amend NIST Handbook 133 as follows:

4.XX. Plywood and Wood-Based Structural Panels

4.XX.1. Test Equipment

- **Steel linear measure**
  - **For labeled dimensions exceeding 304 mm (12 in), use a measure with 0.05 mm ($^1/_{32}$ in or 0.031 in) graduations.**
- **Calculator**
- **Worksheet for Plywood Sheet and Wood-Based Structural Panels**
- **Micrometer, Caliper, or Dial Gauge 25mm-50mm (1 in – 2 in) with 19.1 mm ($^3/_4$ in) anvils.**
  - **A mechanism that applies constant pressure between 34 kPa (5psi) and 69 kPa (10 psi) during the measurement.**
- **For "tongue and groove" (e.g., floor panels) and "ship lap" (e.g., exterior siding panels) a Micrometer with a 152 mm (6 in) throat; 19.1 mm ($^3/_4$ in) anvils may be necessary.**
  - **A mechanism that applies constant pressure between 34 kPa (5psi) and 69 kPa (10 psi) during the measurement.**
- **Gage blocks.**
- **The latest version of Voluntary Product Standard PS 1-09 "Structural Plywood"**
- **The latest version of Voluntary Product Standard PS 2-10 "Performance Standard for Wood-Based—Structural-Use-Panels."**

4.XX.2. Test Procedure

This procedure may be used to verify the length, width, and thickness of plywood and wood-based structural panels.

a. Plywood sheets

- **Shall be labeled in accordance with Voluntary Product Standard PS 1-09 "Structural Plywood",**
  - **Includes grade, Performance Category (abbreviations PERF CAT, CAT or Category are permitted), thickness and the mill number.**

- **Panel sizes are typically 1.2 m (4 ft) × 2.4 m (8 ft), or 2.7 m (9 ft) or 3 m (10 ft) on a nominal basis.**
- **Panel length and width information will be included on the panel manufacturer bundle tag.**
- **Panels shall comply with the thickness tolerances for the Performance Category in Table 10. Plywood Thickness Requirements in Voluntary Product Standard PS 1-09.**
- **Panels shall bear the stamp of a qualified inspection and testing agency in accordance with Voluntary Product Standard PS 1-09, Section 7.1 Certification.**

b. Structural Panels

- **Structural panels include oriented strand board (OSB) and structural plywood.**
- **Shall be labeled according to Voluntary Product Standard (PS) 2-10 "Performance Standard for Wood-Based Structural Use Panels" For grade, span rating, Performance Category (abbreviations PERF CAT, CAT or Category are permitted), thickness and the mill number.**
- **Performance Category, such as 23/32 PERF CAT, means that the sheet shall comply with the thickness tolerances for 23/32 PERF CAT in Voluntary Product Standard (PS) 2-10, Table 1 "Panel Thickness Requirements."**

Notes:

1) **When plywood sheets or structural panels are tested in retail stores, it is recommended that they be sorted by mill and then panel type (grade, thickness).**
2) **If lots are mixed be sure to record the codes for all sheets in the sample so that the inspector and other interested parties can follow up on the information.**
3) **Record or attach a photograph of the information located on the grade stamp including the manufacturer, grade, standard (i.e., PS 1), mill number and agency.**

Moisture Content: Testing moisture content is not required, but noting the conditions and signs of weather exposure is noteworthy. Moisture meters, if utilized are used in the field for rough estimates only (± 5%) due to the properties of wood and adhesives which can influence the electrical properties used in the meters.

Test Procedure:

Follow Section 2.3.1. "Define the Inspection Lot." Use a "Category A" sampling plan in the inspection; select a random sample.

b. Identify the Performance Category and actual size of each piece (e.g., 1.2 m × 2.4 m (4 ft × 8 ft), from the NIST Voluntary Product Standards PS1-09 or PS2-10. "

c. Conduct a visual inspection of each panel to ensure that there are no signs of water or other damage. Remove any outer pieces (top, sides) that have been exposed to the elements (e.g., weather, rain, moisture, sun) from the lot.

a) Set up in an area away from foot traffic or material moving equipment. Place the piece of wood to be measured on a solid flat surface.

Note: Overlapping (i.e., shipped siding) or interlocking panels (i.e., tongue and groove floor panels) shall be measured according to the exposed face. Measurements are taken on the surface that will be exposed after installation and does not include the overlap tab.

b) Determining Length:

For sheet length's up to 3 m (10 ft), take at least 2 measurements along the sheet length about one-quarter of the way from the center line to each edge of the sheet (see drawing). Average the results to obtain the Average Length (AL).

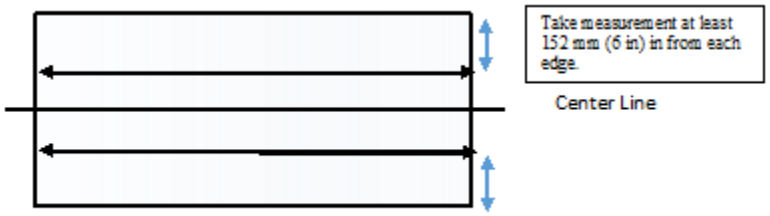

FIGURE 4. Determining Length

Note: Measurements should not be made across the ends of the board or where it has a knot or surface defect that may affect the measurement. Measurements should not be taken within 150 mm (6 in) from the edges of the sheet.

c) Determining Width:

For sheet lengths, up to 3 m (10 ft), take at least two measurements across the sheets width about ¼ of the distance from each end of the sheet (see drawing). Average the results to obtain the Average Width (AW).

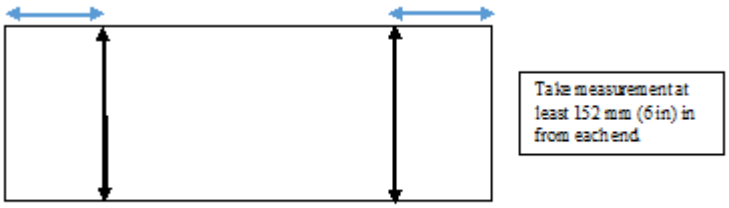

FIGURE 5. Determining Width

Note: Measurements should not be made anywhere across the sheet where it has a knot or surface defect that may affect the measurement. Measurements should not be taken within 150 mm (6 in) from the ends of the sheet.

d) Determining THICKNESS:

- **Verify the accuracy of the micrometer, caliper or dial gauge using the gauge blocks. Use the micrometer, caliper, or dial gauge 25mm-50mm (1 in – 2 in); 19.1 mm ($^3/_4$ in) anvils to measure thickness and record the actual dimensions on the "Worksheet for Plywood Sheets".**

- **For "tongue and groove" (e.g., floor panels) and "ship lap" (e.g., exterior siding panels) a micrometer with a 152 mm (6 in) throat; 19.1 mm ($^3/_4$ in) anvils may be necessary.**

The location of the measurements shall be representative of general panel thickness at approximate mid-length along each edge of the panel. The average of at least 10 equidistant measurements shall be taken

to determine the thickness of the panel. Take five thickness measurements at least 25 mm (1 in) from each edge along the length of the panel on each side. Avoid measuring at grooved locations on panel siding or at locations where there are splits, knotholes or other locations of permitted grade characteristics.

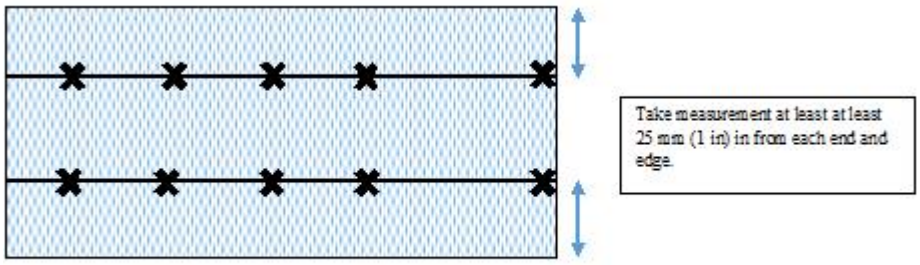

FIGURE 6. Determining Thickness.

NOTE: If a measurement point contains a knot or surface defect that may affect the measurement, then the measurement point shall be shifted from that point.

4.XX.4. Evaluation of Results

3. **To determine lot conformance, return to Section 2.3.7. "Evaluate for Compliance".**

4. **Compliance with the Average Requirement and with the MAV in Table 2-8 "MAVs for Packages Labeled by Length, Width, or Area", is based on the average of multiple measurements on each sheet in the sample.**

   - **Length – 2 measurements**
   - **Width – 2 measurements**
   - **Thickness – 10 measurements**

5. **If the sample from the lot fails the Average Requirement, a statistical test is applied to a negative average error prior to determining if the sample passes or fails.**

***It is recommended that the inspector notify APA – The Engineered Wood Association, if any lots that fail compliance. APA may be able to provide further evaluation.**

APA
7011 S. 19th Street, Tacoma, WA 98466
Main Phone: (253) 620-6600
URL: www.apawood.org

Worksheet for Plywood Sheets and Wood-Based Structural Panels			
Product:		**Mill Number and Agency:**	
Labeled Dimensions:		**Address:**	**City/State/Zip**
Length			
Width		**Brand/Grade/Surface**	**Testing Location:**
Thickness			

	Length	Width	Thickness			Length	Width	Thickness	
Piece #1					**Piece #2**				
Average					**Average**				
Error					**Error**				
Piece # 3					**Piece # 4**				
Average					**Average**				
Error					**Error**				
Piece # 5					**Piece # 6**				
Average					**Average**				
Error					**Error**				
Piece # 7					**Piece # 8**				
Average					**Average**				
Error					**Error**				
Piece # 9					**Piece # 10**				
Average					**Average**				
Error					**Error**				
Piece # 11					**Piece # 12**				
Average					**Average**				
Error					**Error**				

Table 2-8. MAV for Packages Labeled by Length, Width or Area

1 m (1 YD) or less is 3 % of labeled quantity

More than 1 m (1 YD) to 43 m (48 YD) is 1.5 % of labeled quantity

Section 1. Compliance with Maximum Allowable Variation

1. Calculate the MAV for labeled **thickness** (i.e., 0.03 × thickness =) _____. Do any of the average minus errors for thickness exceed the MAV?

a) If yes, the sample fails. Go to Section 5 and select "Lot Rejected."

b) If no, go to Step 2.

2. Calculate the MAV for labeled **length** (i.e., 0.015 × length =) _____. Do any of the average minus errors for length exceed the MAV?

a) If yes, the sample fails. Go to Section 5 and select "Lot Rejected."

b) If no, go to Step 3.

3. Calculate the MAV for labeled **width** (i.e., 0.015 × width =) _____. Do any of the average minus errors for width exceed the MAV?

a) If yes, the sample fails. Go to Section 5 and select "Lot Rejected."

b) If no, proceed to Section 2.

Section 2. Compliance with the Average Requirement – Thickness

4. Calculate the Average Error for labeled thickness _____. The sample passes this requirement if the Average Error is zero or a positive number. Go to Section 3. If the Average Error is a negative number, go to Step 5.

5. Calculate the Sample Standard Deviation (*s*) and multiply (*s*) by the Sample Correction Factor (*SCF*) for the sample size to obtain the Sample Error Limit (*SEL*). Go to Step 6.

*(s)*_____ × (*SCF*) _____ = *SEL* _____

6. Disregarding the signs, is the *SEL* in 5 larger than the Average Error in 4? If yes, the sample passes, go to Section 3. If no, the sample fails, go to Section 5 and select "Lot Rejected.".

Section 3. Compliance with the Average Requirement – Length

7. Calculate the Average Error for labeled length_____. The sample passes this requirement if the Average Error is zero or a positive number. Go to Section 4. If the Average Error is a negative number, go to Step 8.

8. Calculate the Sample Standard Deviation (*s*) and multiply (*s*) by the Sample Correction Factor (*SCF*) for the sample size to obtain the Sample Error Limit (*SEL*). Go to Step 9.

*(s)*_____ × (*SCF*) _____ = *SEL* _____

9. Disregarding the signs, is the *SEL* in 8 larger than the Average Error in 7? If yes, the sample passes, go to Section 5 and select "Lot Approved". If no, the sample fails, go to Section 5 and select "Lot Rejected."

Section 4. Compliance with the Average Requirement – Width

10. Calculate the Average Error for labeled width _____. The sample passes this requirement if the Average Error is zero or a positive number. Go to Section 5. If the Average Error is a negative number, go to Step 11.

11. Calculate the Sample Standard Deviation (*s*) and multiply (*s*) by the Sample Correction Factor (*SCF*) for the sample size to obtain the Sample Error Limit (*SEL*). Go to Step 12.

*(s)*_____ × (*SCF*) _____ = *SEL* _____

12. Disregarding the signs, is the *SEL* in 11 larger than the Average Error in 10? If yes, the sample passes, go to Section 5 and select "Lot Approved". If no, the sample fails, go to Section 5 and select "Lot Rejected."

Section 5. Action Taken: ☐ Lot Rejected ☐ Lot Approved

Random Numbers: enter the numbers as you select them in the top row and reorder them in the bottom row.

Background/Discussion: See Appendix A, Page L&R-A26.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

NET-5 Appendix A: Tables 1.1. Agencies Responsible for Package Regulations and Applicable Requirements and 2.9. U.S. Department of Agriculture, Meat and Poultry, and Siluriformes Groups and Lower Limits for Individual Packages (Maximum Allowable Variations [MAVs])

Source:
NIST OWM (2018)

Purpose:
Update NIST Handbook 133 to align with regulations from the USDA, Food Safeway and Inspection Service.

Item under Consideration:
Amend NIST Handbook 133 as follows:

Table 1-1. Agencies Responsible for Package Regulations and Applicable Requirements			
Commodity	**Responsible Agency**	**NIST Handbook 133 Sampling Plans**	**Table of Maximum Allowable Variations**

Table 1-1. Agencies Responsible for Package Regulations and Applicable Requirements			
Commodity	**Responsible Agency**	**NIST Handbook 133 Sampling Plans**	**Table of Maximum Allowable Variations**
Meat**, ~~and~~** Poultry**, and Siluriformes*** ***Siluriformes include, but are not limited to, "catfish" (fish of the family Ictaluridae) and "basa" and "swai" (fish of the family Pangasiidae.**	U.S. Department of Agriculture, Food Safety and Inspection Service and state and local weights and measures.	**Use Table 2-1.** Sampling Plans for Category A to test packages at other than point of pack. **Use Table 2-2.** Sampling Plans for Category B to test packages in federally inspected meat and poultry plants.	**Table 2-9**. U.S. Department of Agriculture, Meat**, ~~and~~** Poultry, **and Siluriformes** Groups and Lower Limits for Individual Packages
Foods, drugs, and cosmetics subject to the Food, Drug, and Cosmetic Act including those packaged at the retail store level that have been in interstate commerce (e.g., seafood) or those made with ingredients that have been in interstate commerce and beer made from substitutes for malted barley (e.g., sorghum, rice, or wheat) and wine beverages with an alcohol content of less than 7 % by volume	U.S. Food and Drug Administration and state and local weights and measures **http://www.fda.gov**	**Use Table 2-1.** Sampling Plans for Category A to test packages at all locations.	**Table 2-5.** MAVs for Packages Labeled by Weight **Table 2-6**. MAVs for Packages Labeled by Liquid or Dry Volume **Table 2-7.** MAVs for Packages Labeled by Count **Table 2-8.** MAVs for Packages Labeled by Length (Width) or Area **Table 2-10.** Exceptions to the MAVs for Textiles, Polyethylene Sheeting and Film, Mulch and Soil Labeled by Volume, Packaged Firewood Labeled in Terms of Volume, and Packages Labeled by Count with 50 Items or Fewer, and Specific Agriculture Seeds Labeled by Count
Tobacco	U.S. Food and Drug Administration and local weights and measures. www.fda.gov		
Food products not subject to the Federal Food, Drug, and Cosmetic Act, including meat and poultry products packaged at the retail store level	State and local weights and measures http://www.nist.gov/wmd/		
Non-food Consumer Products	Federal Trade Commission **http://www.ftc.gov**		

Table 1-1. Agencies Responsible for Package Regulations and Applicable Requirements			
Commodity	**Responsible Agency**	**NIST Handbook 133 Sampling Plans**	**Table of Maximum Allowable Variations**
Non-food Consumer and Non-consumer Products	State and local weights and measures		
Alcohol Products, except for beer made from substitutes for malted barley (e.g., sorghum, rice, or wheat) and wine beverages with an alcohol content of less than 7 % by volume, which are regulated by FDA	Alcohol and Tobacco Tax and Trade Bureau. State and local weights and measures http://www.ttb.gov	**Use Table 2-1.** Sampling Plans for Category A to test packages at all locations.	**Table 2-5.** MAVs for Packages Labeled by Weight **Table 2-6**. MAVs for Packages Labeled by Liquid or Dry Volume **Table 2-7.** MAVs for Packages Labeled by Count **Table 2-8.** MAVs for Packages Labeled by Length (Width) or Area **Table 2-10.** Exceptions to the MAVs for Textiles, Polyethylene Sheeting and Film, Mulch and Soil Labeled by Volume, Packaged Firewood Labeled in Terms of Volume, and Packages Labeled by Count with 50 Items or Fewer, and Specific Agriculture Seeds Labeled by Count
Pesticides	U.S. Environmental Protection Agency and state and local weights and measures **http://www.epa.gov**		

Table 2-9. U.S. Department of Agriculture, Meat ~~and~~ Poultry, and Siluriformes Groups and Lower Limits for Individual Packages (Maximum Allowable Variations [MAVs])		
Definition of Group and Labeled Quantity		**Lower Limit for Individual Weights (MAVs)**
Homogenous Fluid When Filled (e.g., baby food or containers of lard)	**All Other Products**	
Less than 85 g or 3 oz		10 % of labeled quantity
85 g or more to 453 g 3 oz or more to 16 oz		7.1 g 0.016 lb (0.25 oz)
More than 453 g More than 16 oz	85 g or more to 198 g 3 oz to 7 oz	14.2 g 0.031 lb (0.5 oz)
	More than 198 g to 1.36 kg 7 oz to 48 oz	28.3 g 0.062 lb (1 oz)
	More than 1.36 kg to 4.53 kg More than 48 oz to 160 oz	42.5 g 0.094 lb (1.5 oz)
	More than 4.53 kg More than 160 oz	1 % of labeled quantity

Background/Discussion: See Appendix A, Page L&R-A27.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

NET-6 D Recognize the Use of Digital Density Meters

Source:
Missouri (2016)

Purpose:
Allow the use of digital density meters for package checking testing of viscous fluids such as motor oils, diesel exhaust fluid (DEF) and antifreeze.

Item under Consideration:
Amend NIST Handbook 133 as follows:

Develop specific test procedures for NIST Handbook 133, "Chapter 3. Test Procedures – For Packages Labeled by Volume" that would recognize the use of digital density meters in lieu of volumetric flasks and thermometers when testing certain viscous fluids such as motor oil, DEF, antifreeze, syrups, etc.

Background/Discussion: See Appendix A, Page L&R-A28.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

OTH – OTHER ITEMS

OTH-1 D Fuels and Lubricants Subcommittee

Source:
The Fuels and Lubricants Subcommittee (2007)

Purpose:
Update the Uniform Engine Fuels, Petroleum Products, and Automotive Lubricants Regulation in NIST Handbook 130 including major revisions to fuel ethanol specifications. Another task will be to update the Basic Engine and Fuels, Petroleum Products, and Lubricants Laboratory Publication.

Item under Consideration:
This item is under development. All comments should be directed to Dr. Bill Striejewske, FALS Chair at (775) 353-3792, wstriejewske@agri.state.nv, or Ms. Lisa Warfield, NIST Technical Advisor at (301) 975-3308, lisa.warfield@nist.gov.

Background/Discussion: See Appendix A, Page L&R-A29.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

OTH-2 D Packaging and Labeling Subcommittee

Source:
Packaging and Labeling Subcommittee (2011)

Purpose:
Provide an update of the activities of this Subcommittee which reports to the L&R Committee. The mission of PALS is to assist the L&R Committee in the development of agenda items related to packaging and labeling. The Subcommittee will also be called upon to provide important and much needed guidance to the regulatory and consumer packaging communities on difficult questions. PALS will report to NCWM L&R Committee. The Subcommittee is comprised of a Chairperson and eight voting members.

Item under Consideration:
This item is under development. All comments should be directed to Mr. Chris Guay, Packaging and Labeling Subcommittee Chair at (513) 983-0530, guay.cb@pg.com or Mr. David Sefcik, NIST Technical Advisor at (301) 975-4868, david.sefcik@nist.gov.

Background/Discussion: See Appendix A, Page L&R-A30.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

Mr. Ethan Bogren, Westchester County, New York | Committee Chair
Mr. John Albert, Missouri | Member
Ms. Michelle Wilson, Arizona | Member
Mr. Hal Prince, Florida | Member
Mr. John McGuire, New Jersey| Member
Ms. Rebecca Richardson, MARC-IV Consulting | AMC Representative
Mr. Lance Robertson, Measurement Canada | Canadian Technical Advisor
Ms. Lisa Warfield, NIST OWM | Technical Advisor
Mr. David Sefcik, NIST OWM | Technical Advisor

Laws and Regulations Committee

Appendix A

Background/Discussion on Agenda Items of the Laws and Regulations (L&R) Committee

Subject Series List

Table A
Table of Contents

Table B
Glossary of Acronyms and Terms

Acronym	Term	Acronym	Term
AKI	Minimum Antiknock Index	LNG	Liquefied Natural Gas
API	American Petroleum Institute	NCWM	National Conference on Weights and Measures
ASTM	ASTM International	NEWMA	Northeastern Weights and Measures Association
CFR	Code of Federal Regulations	NIST	National Institute of Standards and Technology
CNG	Compressed Natural Gas	OWM	Office of Weights and Measures
CWMA	Central Weights and Measures Association	PALS	Packaging and Labeling Subcommittee
FALS	Fuels and Lubricants Subcommittee	S&T	Specifications and Tolerances
FDA	Food and Drug Administration	SWMA	Southern Weights and Measures
FPLA	Fair Packaging and Labeling Act	UPLR	Uniform Packaging and Labeling Regulation
FTC	Federal Trade Commission	USNWG	U.S. National Work Group
HB	Handbook	WWMA	Western Weights and Measures Association
L&R	Laws and Regulations		

Details of All Items
(In order by Reference Key)

BLOCK 1 ITEMS (B1) PESTICIDE LABELING

B1: PAL-1 **Sections 6.12. Supplementary Quantity Declarations, 6.14. Qualification of Declaration Prohibited, 12. Variations to be allowed.**

B1: NET-1 **Sections 1.2.2. Average Requirement, 1.4. Other Regulatory Agencies Responsible for Package Regulations and Applicable Requirements, 2.3.7.2. Average Requirement, and Appendix A. Tables – Table 1-1 "Agencies Responsible for Package Regulations and Applicable Requirements**

Background and Discussion:
Products subject to the EPA control are not covered by the Fair Packaging and Labeling Act (FPLA) and as a result some EPA regulations differ from those adopted by the Federal Trade Commission (FTC) and the Food and Drug Administration (FDA) under Fair Packaging and Labeling Act (FPLA). Within the UPLR Sections 6.12. "Supplementary Quantity Declaration" and 6.14. "Qualification of Declaration Prohibited" prohibits the use of the term "minimum" in conjunction with declarations of net quantity of contents. In addition, under Section 12. Variations to be Allowed, the "minimum system" of fill is not recognized.

In the UPLR Sections 6.12. "Supplementary Quantity Declaration" and 6.14. "Qualification of Declaration Prohibited" prohibits the use of the term "minimum" in conjunction with declarations of net quantity of contents. In addition, the "minimum system" of fill is not recognized under UPLR Section 12. "Variations to be Allowed."

The OWM is proposing that a footnote be added to the handbook to explain the difference in to inform readers that EPA regulations in 40 CFR 156.10(d) permit the use of the term "minimum weight" in conjunction with declarations of the net quantity of contents and that the minimum system of fill requirements applies whenever the packer uses the term.

Adding this information will alert the reader that UPLR prohibitions on the use of the term "minimum" must not be applied to pesticides and other products subject to EPA regulations (these must bear an EPA registration number). This should ensure that enforcement action under the UPLR requirements that prohibits its use, will not be taken. In addition, adding this to the UPLR will also provide guidance on the application of fill requirements under a minimum system of fill.

OWM does not anticipate any opposition to this because the amendments in this proposal are being added only to inform users of the of an existing conflict between the UPLR and EPA labeling regulations. This will inform State and local weights and measures inspectors and other users that EPA allows the use of the term "minimum" but also when that "minimum" is used the average system is not applicable. When the "minimum" statement is used on EPA registered products they allow for reasonable amounts of overfill are permissible but no package in the sample may contain less than the stated quantity.

EPA Registration Number Required to Appear on Package

Minimum weight statement

Regional Association Comments:
WWMA: Lisa Warfield, NIST Technical Advisor, commented that Items 2301-1 & 2600-1 are intended to harmonize EPA requirements that were previously unknown with Handbook 130. Ms. Warfield commented that the EPA Labeling Manual is located on the NCWM supporting document website. Chris Guay, Procter & Gamble commented that this item is a complete surprise and is related to FIFRA (Federal Insecticide Fungicide and Rodenticide Act). Mr. Guay commented that P&G has a number of products that would fall under these requirements, and most large companies would not change their procedures because the requirements for FPLA (Federal Packaging and Labeling Act) are more stringent. Mr. Guay is supportive of this item and the Handbook 133 test procedure moving forward as a Voting item. NIST has been in contact with the EPA to alert them of the differences. The Committee believes this item is ready for Voting status.

SWMA: Lisa Warfield (NIST Technical Advisor) provided an overview of Items 2301-1 & 2600-1. There is an existing conflict with the EPA Labeling Regulations and NIST Handbook 130 for labeling of pesticides and microbacterial products registered under EPA. EPA regulated products are not covered under the Fair Packaging and Labeling Act. This proposal modifies the UPLR alerting users that the term "minimum: is allowed for EPA registered products. In addition, allowing for a minimum fill differs from HB133 Requirements. Item 8 is a HB133 companion item that provides guidance for products labeled with the term "minimum." Guidance for the EPA labeling is located under the NCWM Interim 2018 meeting documents. The SWMA recommends this as a Voting item.

CWMA: The committee seeks to clarify that this item applies only to products covered by FIFRA and not all EPA products and recommended that it be a Voting item.

NEWMA: An industry representative commented that the word "pesticide" in NOTE X is not an appropriate term. He believes that language from the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) should be used rather than EPA, which is too broad. Several state regulators agreed. NEWMA believes this item is fully developed and recommends Voting status with amended language, which appears below:

NOTE X: Packages of ~~pesticide~~s products subject to the labeling ~~regulations~~ requirements under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), administered by ~~of~~ the United States Environmental Protection Agency ~~under~~ (40 CFR 156.10.d.) are permitted to display the term "minimum" in conjunction with the net quantity of contents declaration. The packer may choose to fill the packages under the minimum or average systems of fill. However, if the minimum system is declared, variations above minimum quantity is permissible only to the extent that it represents deviation unavoidable in good manufacturing practice and no variation below the stated minimum quantity is permitted.

6.12. Supplementary Quantity Declarations. – The required quantity declaration may be supplemented by one or more declarations of weight, measure, or count, such declaration appearing other than on a principal display panel. Such supplemental statement of quantity of contents shall not include any term qualifying a unit of weight, measure, or count that tends to exaggerate the amount of commodity contained in the package (e.g., "giant quart, "larger" liter, "full" gallon, "when packed," "minimum" **(NOTE X, page X)**" or words of similar import).

6.14. Qualification of Declaration Prohibited. –In no case shall any declaration of quantity be qualified by the addition of the words "when packed," "minimum**,** ***(NOTE X,* page X)**", or "not less than or any words of similar import (e.g., "approximately"), nor shall any unit of weight, measure, or count be qualified by any term (such as "jumbo "giant," "full," or the like) that tends to exaggerate the amount of commodity.

Section 12. Variations to be Allowed

12.1. Packaging Variations. ***(NOTE X,* page X)**

12.1.1. Variations from Declared Net Quantity – Variations from the declared net weight, measure, or count shall be permitted when caused by unavoidable deviations in weighing, measuring, or counting the contents of individual packages that occur in current good manufacturing practice, but such variations shall not be permitted to such extent that the average of the quantities in the packages

of a particular commodity or a lot of the commodity that is kept, offered, or exposed for sale, or sold is below the quantity stated, and no unreasonable shortage in any package shall be permitted even though overages in other packages in the same shipment, delivery, or lot compensate for such shortage. Variations above the declared quantity shall not be unreasonably large.

12.1.2. Variations Resulting from Exposure. – Variations from the declared weight or measure shall be permitted when caused by ordinary and customary exposure to conditions that normally occur in good distribution practice and that unavoidably result in change of weight or measure, but only after the commodity is introduced into intrastate commerce, provided the phrase "introduced into intrastate commerce" as used in this paragraph shall be construed to define the time and the place at which the first sale and delivery of a package is made within the state, the delivery being either:

(a) directly to the purchaser or to his/her agent; or

(b) to a common carrier for shipment to the purchaser,

and this paragraph shall be construed as requiring that so long as a shipment, delivery, or lot of packages of a particular commodity remains in the possession or under the control of the packager or the person who introduces the package into intrastate commerce, exposure variations shall not be permitted.

12.2. Magnitude of Permitted Variations. ***(NOTE X, page X)*** – The magnitude of package variations of this regulation permitted under Sections 12. Variations to be Allowed, 12.1. Package Variations, 12.1.1. Variations from Declared Net Quantity, and 12.1.2. Variations Resulting from Exposure shall be those expressly set forth in this regulation and variations such as those contained in the procedures and tables of the latest version of NIST Handbook 133, "Checking the Net Contents of Packaged Goods."

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

Return to the Item

BLOCK 2 ITEMS (B2) KEROSENE, LPG, AND FUELS, LUBRICANTS AND AUTOMOTIVE PRODUCTS, CNG, LNG AND DEF

B2: MOS-1	**Section 2. 9. Kerosene (Kerosine).**
B2: FLR-1	**Section 3.7. Kerosene (Kerosine).**
B2: MOS-2	**Section 2.21. Liquefied Petroleum Gas.**
B2: FLR-2	**Section 3.10. Liquefied Petroleum Gas.**
B2: MOS-3	**Sections 2.15. Solid Fuel Products, 2.16. Compressed or Liquefied Gases in Refillable Cylinders, 2.19. Kerosene (Kerosine), 2.20. Gasoline Oxygenate Blends, 2.21. Liquefied Petroleum Gas, 2.27. Retail Sales of Natural Gas Sold as a Vehicle Fuel, 2.30. Ethanol Flex Fuel, 2.31. Biodiesel and Biodiesel Blends, 2.32. Retail Sales of Hydrogen, 2.33. Oil, 2.34. Retail Sales of Electricity Sold as a Vehicle Fuel, 2.35. Diesel Exhaust Fluid, and 2.XX. Transmission Fluid.**
B2: FLR-3	**Section 3. Classification and Method of Sale of Petroleum Products**
B2: FLR-4	**Sections 1.12. Compressed Natural Gas (CNG), 1.14. Diesel Exhaust Fluid (DEF), 1.26. Gasoline Gallon Equivalent (GGE), 1.XX. Diesel Gallon Equivalent (DGE), and 1.36. Liquefied Natural Gas Equivalent (LNG)**

Background/Discussion:
The Uniform Regulation for the Method of Sale of Commodities and the Uniform Engine Fuels and Automotive Lubricants Regulation have different information on the method of sale for Kerosene, Liquefied Petroleum Gas.

This proposal is to integrate the information from both sections to create identical method of sale language in the two regulations.
Information of the method of sale for fuels, lubricants and automotive products currently can appear in the handbook in either the Uniform Regulation for the Method of Sale of Commodities and the Uniform Engine Fuels and Automotive Lubricants Regulation. Sometimes the information for the same product is different in the two sections. Having the information in two locations creates an added burden when maintaining and updating the handbook. This proposal is to consolidate and reorganize that information into the Uniform regulation for the Method of Sale of Commodities. This proposal is not intended to modify a specific method of sale. Those modifications should be considered separately by product.

This proposal would copy method of sale information from the Uniform Engine Fuels and Automotive Lubricants Regulation, if it is not currently in the Uniform Regulation for the Method of Sale of Commodities, and reorganize the information in Uniform Regulation for the Method of Sale of Commodities. Discussion is needed on how this information is referenced in state regulations.

The Uniform Regulation for the Method of Sale of Commodities and the Uniform Engine Fuels and Automotive Lubricants Regulation have slight differences in the definitions for natural gas fuels and diesel exhaust fluid. This proposal is to update the information in the Fuels and Automotive Lubricants Regulation.

Regional Association Comments:
WWMA: The Committee believes the item is fully developed. The Committee stresses the importance of understanding aspects of the PowerPoint presentation and additional information located on the NCWM 2018 Interim website prior to attending the Interim Meeting, 2018. The Committee recognizes that the intent of this group of items is to reflect identical language in both sections of Handbook 130 but no substantive changes to the regulation. The WWMA recommended that it be an Informational item.

SWMA: There was no opposition to this proposal. The submitter had originally requested this be a Developing item not wanting to cause any confusion with items being moved forward at the NCWM 2017 Annual Meeting. The SWMA believes that this item is fully developed and recommends this as a Voting item.

CWMA: The purpose of these items is to consolidate the Method of Sale and Uniform Engine Fuels and Lubricants sections of Handbook 130. A regulator from Kansas asked if since we already have the section for fuels and lubricants, why not put the method of sale into that section. A state regulator from Missouri commented that almost all states adopt the method of sale section, and having method of sale for fuels in that section would allow maximum adoption of uniform methods. The CWMA recommended that this be a Voting item.

NEWMA: Rebecca Richardson presented the proposal from Chuck Corr and his working group regarding this group of items (2302-3, 2302-6, 2302-8, 2307-1, 2307-3, 2307-6 and 2307-7). A retired state regulator from NY commented that it is not appropriate to put any items in the Method of Sale that does not deal with declaring the unit of measure for what is being sold. All other items should appear only in the Uniform Engine Fuels and Automotive Lubricants Regulation of Handbook 130. Several state regulators concur. One state regulator from CT believes that the language should be in both sections of the Handbook for states that do not adopt both sections. Another state regulator commented that even if the regulation was in both sections, a state would have to legislate promulgation and authority to enforce the statute. A state regulator commented that in general Handbook 130 references "current version of ASTM", and the FTC Fuel Rating Rule - 16 CFR Part 306 – references specific older versions of ASTM standards. He is wondering which version NCWM is following. This language appears in Item 2302-8. After considerable discussion, the Committee recommends withdrawing Items 2302-3, 2302-6, 2302-8, 2307-3, 2307-6 and 2307-7 because the language in HB 130 Method of Sale serves a different and distinct function from Section G. Uniform Engine Fuels and Automotive Lubricants Regulation. Since Item 2307-1 provides only definitions that are useful and relevant for both HB 130 sections, Item 2307-1 is recommended as a voting item. Comments specific to Items 2301-1 and 2307-6 are that FALS revisit language regarding IRS code and other potential agency conflicts if the item moves forward. NEWMA recommended that this item be Withdrawn.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

Return to the Item

BLOCK 3 ITEMS (B3) GASOLINE-OXYGENATE BLENDS AND FLEX-FUEL BLENDS

B3: MOS-4 Section 2.20. Gasoline – Oxygenate Blends and Section 2.30. Ethanol Flex-Fuel
B3: FLR-5 Section 3.28. EPA Labeling Requirements Also Apply and Section 3.8. Ethanol Flex Fuel

Background/Discussion:
The proposal to eliminate the duplicative wording that appears in Section B. Method of Sale for Commodities will streamline the Handbook contents, send users of the Handbook to only one section that provides appropriate guidance on labeling for both oxygenated fuels and ethanol flex fuels. Having duplicative wording is both confusing and redundant. There is no other fuel related guidance, for gasoline or diesel for that matter, that appears in Section B. All fuel related information appears in Section G. Uniform Engine Fuels and Automotive Lubricants section.

At the 2017 NCWM Interim Meeting, Dr. Curran (FALS Chair) remarked that they are submitting modified language to the Committee. Several states and stakeholders support this amendment. There was a remark that the FTC rule references EPA but does not require it to be followed. The Committee moved this forward as a Voting item.

At the 2017 NCWM Annual Meeting, Dr. Curran informed the Committee that the FALS met during their Sunday, July 16. There was extensive discussion and comment on this item. The FALS was unable to achieve consensus on the language under consideration in Publication 16. The EPA and FTC have conflicting regulations. The FTC has labeling requirements has fewer elements to their language. The Committee noted that Section 2.30.1. was reflected as being stricken, this is not accurate and corrected editorially. The Committee reviewed the following alternatives.

1.) Making the item Informational and sending it back to the FALS for further consideration and review.
2.) Move the item forward as it published in Publication 16 (2017).
3.) Move the item forward with proposed amendments submitted by API.
4.) Move the item forward with alternative language proposed by Committee member, Michelle Wilson and Washington State regulator, Tim Elliot.

The Committee agreed to add a cross reference to Section 2.20.3. EPA Labeling Requirements Also Apply and Section 2.30.2. Labeling Requirements to add clarity. This modified change was moved forward on the addendum sheet for a Vote. In response to a motion made on the floor during the voting session, the Committee reconsidered this Item and agreed to withdraw its recommendation for adoption and removed it from the voting agenda. It was believed that the amended proposal was substantially different than the version that was published in the Committee's Agenda. The amended proposal will be returned to the Committee's agenda.

Regional Association Comments:
WWMA: Due to lack of consensus from industry testimony, The Committee believes the best approach for further consideration of this item is to refer this item to the Fuels and Lubricants Subcommittee (FALS). The WWMA recommended that it be an Informational item.

SWMA: Russ Lewis spoke on behalf of API and remarked that the modifications simply point out the fact that the EPA requires their labeling for any fuel containing between 10% and 15% volume ethanol. Additionally, the proposed modifications point out the discrepancy between EPA and FTC categorization on E15 fuels and are designed to keep NIST HB 130 Sections B and G synchronized.

The latest guidance from U.S. EPA on the issue of using Flex-Fuel labeling to sell E15 was published in the FRN within the preamble to the proposed rule update for renewable fuels. The proposed rule is published here: https://www.federalregister.gov/documents/2016/11/16/2016-25292/renewables-enhancement-and-growth-support-rule. Mr. Lewis submitted supporting documents to the SWMA L&R and will be forwarding to the NCWM for posting at the national level.

Several comments were heard but there was no consensus on how to proceed. The SWMA is recommending that this item proceed through FALS for additional consideration.

CWMA: Kristy Moore, K Moore Consulting commented that she strongly opposes the current language, and is willing to submit a new Form 15 for the Committee and FALS to consider. Among comments heard, an industry representative commented that this item is intended to provide certainty in the market place, and a growing number of consumers are driving vehicles they do not own, and are reliant on clear fuel distinctions at the pump. After hearing the comments during L&R Open Hearings, the Committee feels that the most efficient way to further vet this issue is through FALS. Consequently, the CWMA recommends this item remain Informational.

NEWMA: The Chairman read comments submitted by the original submitter, Kristy Moore. She commented that she opposes the changes to the item and prefers that it be referred back to FALS or withdrawn. A regulator from NY commented that this item is directed at ethanol flex fuel but is also referencing 16 CFR Part 306. The definitions are not the same. NEWMA recommended this item be referred back to FALS for further development and Informational status.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

Return to the Item

BLOCK 4 ITEMS (B4) GASOLINE AND GASOLINE WITH ETHANOL

B4: MOS-4 **Section 2.20. Gasoline – Oxygenate Blends**
B4: FLR-5 **Sections 1. Definitions, 2.1. Gasoline and Gasoline Oxygenate Blends, 2.7. Denatured Fuel Ethanol. 3.2. Automotive Gasoline and Automotive Gasoline Oxygenate Blends and 4. Retail Storage Tanks and Dispenser Filters**

Background/Discussion:
The method of sale information in Handbook 130 should be consistent with federal regulations and identical in the Method of Sale Regulation and the Engine Fuels and Automotive Lubricants Regulation. The information in the two sections is not the same and is inconsistent with federal regulations.

Terminology related to ethanol and fuels containing ethanol in Handbook 130 is inconsistent with EPA and FTC definitions. This proposal would harmonize the related terminology in the handbook with the federal definitions. Several comments have also been received that it would be helpful to add references to federal regulations in the handbook. This proposal included a number of these references.

U.S. Federal Regulations cited in proposals

EPA REGULATIONS – 27 CFR Part 80

§80.2 Definitions.

Definitions apply in this part as described in this section.

(c) *Gasoline* means any fuel sold in any State[1] for use in motor vehicles and motor vehicle engines, and commonly or commercially known or sold as gasoline.

[1]*State* means a State, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa and the Commonwealth of the Northern Mariana Islands.

(g) *Unleaded gasoline* means gasoline which is produced without the use of any lead additive and which contains not more than 0.05 gram of lead per gallon and not more than 0.005 gram of phosphorus per gallon.

(ee) *Reformulated gasoline* means any gasoline whose formulation has been certified under §80.40, and which meets each of the standards and requirements prescribed under §80.41.

(rr) *Oxygenated gasoline* means gasoline which contains a measurable amount of oxygenate.

(vvv) *Denatured fuel ethanol (DFE)* means an alcohol of the chemical formula C_2H_6O which contains a denaturant to make it unfit for human consumption, that is produced or imported for use in motor gasoline, and that meets the requirements of §80.1610.

(aaaa) *CBOB* means gasoline blendstock that could become conventional gasoline solely upon the addition of oxygenate.

§80.24 Controls applicable to motor vehicle manufacturers.

(b) The manufacturer of any motor vehicle equipped with an emission control device which the Administrator has determined will be significantly impaired by the use of gasoline other than unleaded gasoline shall manufacture such vehicle with each gasoline tank filler inlet having a restriction which prevents the insertion of a nozzle with a spout having a terminal end with an outside diameter of 0.930 inch (2.363 centimeters) or more and allows the insertion of a nozzle with a spout meeting the specifications of §80.22(f)(2).

FTC REGULATIONS – 16 CFR Part 306

§306.0 Definitions.

As used in this part:

(i) *Automotive fuel* means liquid fuel of a type distributed for use as a fuel in any motor vehicle, and the term includes, but is not limited to:

(1) Gasoline, an automotive spark-ignition engine fuel, which includes, but is not limited to, gasohol (generally a mixture of approximately 90 percent unleaded gasoline and 10 percent ethanol) and fuels developed to comply with the Clean Air Act, 42 U.S.C. 7401 *et seq.*, such as reformulated gasoline and oxygenated gasoline; and

(2) Alternative liquid automotive fuels, including, but not limited to:

(iii) Ethanol flex fuels;

(o) *Ethanol flex fuels* means a mixture of gasoline and ethanol containing more than 10 percent but not greater than 83 percent ethanol by volume.

§306.6 Certification.

In each transfer you make to anyone who is not a consumer, you must certify the automotive fuel rating of the automotive fuel consistent with your determination. You can do this in either of two ways:

(a) Include a delivery ticket or other paper with each transfer of automotive fuel. It may be an invoice, bill of lading, bill of sale, terminal ticket, delivery ticket, or any other written proof of transfer. It must contain at least these four items:

(1) Your name;

(2) The name of the person to whom the automotive fuel is transferred;

(3) The date of the transfer;

(4) The automotive fuel rating. Octane rating numbers may be rounded off to a whole or half number equal to or less than the number determined by you.

(b) Give the person a letter or other written statement. This letter must include the date, your name, the other person's name, and the automotive fuel rating of any automotive fuel you will transfer to that person from the date of the letter onwards. Octane rating numbers may be rounded to a whole or half number equal to or less than the number determined by you. This letter of certification will be good until you transfer automotive fuel with a lower automotive fuel rating, except that a letter certifying the fuel rating of biomass-based diesel, biodiesel, a biomass-based diesel blend, a biodiesel blend, or an ethanol flex fuel will be good only until you transfer those fuels with a different automotive fuel rating, whether the rating is higher or lower. When this happens, you must certify the automotive fuel rating of the new automotive fuel either with a delivery ticket or by sending a new letter of certification.

(c) When you transfer automotive fuel to a common carrier, you must certify the automotive fuel rating of the automotive fuel to the common carrier, either by letter or on the delivery ticket or other paper.

Regional Association Comments:
WWMA: The Committee recommends this item move forward as Informational, and should be referred to FALS for further development.

SWMA: There were several comments heard that this item should proceed through FALS. The submitter commented that this should go through FALS for harmonization and determination of proper terminology. The SWMA is recommending this item go through FALS for additional consideration.

CWMA: The Committee supports the concept of this item and believes it should be further vetted through FALS. The CWMA recommended it be an Informational item.

NEWMA: A retired state regulator from NY commented that there is no method of sale in what is proposed for deletion, so he isn't sure this language should have been included in this section in the first place. There is confusion of language between this item and its companion item (2302-5). A state regulator commented that these proposals are intended to harmonize the Method of Sale section of HB 130 with the Uniform Engine Fuel section. The retired state regulator commented that these items should be split (Items 2302-5 and 2307-5). A state regulator commented that the language "All fuel sold as gasoline should be identified as gasoline" is circuitous. The Committee recommends the item be Informational and sent to FALS to clarify confusion. The retired state regulator from New York further commented that this item should be separated from Item 2302-5, and proposes to amend the wrong section of Handbook 130. NEWMA believes this item merits further consideration and should be referred to FALS as an Informational item.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

Return to the Item

BLOCK 5 ITEMS (B5) OBSOLETE MOTOR OILS

B5: MOS-6 Section 2.33. Oil
B5: FLR-7 Sections 1.43. Motor Oil, 1.44. Racing Oil, 3.13. Oil and 7.2. Reproducibility Limits.

Background/Discussion:
Consumers are being misled and are not being adequately informed under existing Handbook 130 provisions about the performance of "obsolete" oils in the engines of their vehicles. Many of these obsolete oils can damage modern engines. The submitter recognizes that there may be as many as 14 million vehicles that can use pre-1988 motor oils.

Regional Association Comments:
WWMA: The Committee reviewed the modified language submitted by Holly Alfano, and recommends pending editorial review, this item should move forward as an item under consideration.

2.33. Oil.

2.33.1. Labeling of Vehicle Engine (Motor) Oil. – Vehicle engine (motor) oil shall be labeled.

2.33.1.1. Viscosity Grade. – The label on any vehicle engine (motor) oil container, receptacle, dispenser, or storage tank, and any invoice or receipt from service on an engine that includes the installation of vehicle engine (motor) oil dispensed from a receptacle, dispenser, or storage tank, shall contain the viscosity grade classification preceded by the letters "SAE" in accordance with SAE International's latest version of SAE J300, "Engine Oil Viscosity Classification

2.33.1.1.1. Most modern engine oil specifications recommend the use of multigrade engine (motor) oils, and their SAE viscosity grade must appear in the form SAE XXW-YY. The use of "SAE" and of the hyphen are mandatory. Containers used in retail trade (such as bottles, jugs, pails, drums) are explicitly targeted by this legislation.

2.33.1.1.2. Engine oils marketed under obsolete API Service Categories SA and SB shall not be described as multigrades.

NOTE: *If an invoice or receipt from service on an engine has limited room for identifying the viscosity, brand, and service category, then abbreviated versions of each may be used on the invoice or receipt and the letters "SAE" may be omitted from the viscosity classification.*

(Note added 2014)

(Amended 2014)

2.33.1.2. Brand. – The label on any vehicle engine (motor) oil container and the invoice or receipt from service on an engine that includes the installation of bulk vehicle engine (motor) oil dispensed from a receptacle, dispenser, or storage tank shall contain the name, brand, trademark, or trade name of the vehicle engine (motor) oil.

(Amended 2014)

Note: If an invoice or receipt from service on an engine has limited room for identifying the viscosity, brand, and service category, then abbreviated versions of each may be used on the invoice or receipt and the letters "SAE" may be omitted from the viscosity classification.

2.33.1.3. Engine Service Category. – The label on any vehicle engine (motor) oil container, receptacle, dispenser, or storage tank and the invoice or receipt from service on an engine that includes the installation of bulk vehicle engine (motor) oil dispensed from a receptacle, dispenser, or storage tank shall contain **~~the~~at least one** engine service category, **~~or categories,~~** displayed in letters not less than 3.18 mm (1/8 in) in height, as defined by the latest version of SAE J183, "Engine Oil Performance and Engine Service Classification (Other than "Energy Conserving")," API Publication 1509, "Engine Oil Licensing and Certification System," European Automobile Manufacturers Association (ACEA), "European Oil Sequences," or other Vehicle or Engine Manufacturer standards as approved in Section 2.33.1.3.1. Vehicle or Engine Manufacturer Standard**.**

(Amended 2014 **and 20XX**)

2.33.1.3.1. Vehicle or Engine Manufacturer Standard. – The label on any vehicle engine (motor) oil container, receptacle, dispenser, or storage tank and the invoice or receipt from service on an engine that includes the installation of vehicle engine (motor) oil dispensed from a receptacle, dispenser, or storage tank shall identify the specific vehicle or engine manufacturer standard, or standards, met in letters not less than 3.18 mm (1/8 in) in height. If the vehicle (motor) oil only meets a**n active** vehicle or engine manufacturer standard, the label must clearly identify that the oil is only intended for use where specifically recommended by the vehicle or engine manufacturer.

(Added 2014**, Amended 20XX**)

2.33.1.3.2. Inactive or Obsolete Service Categories. – The label on any vehicle engine (motor) oil container, receptacle, dispenser, or storage tank and the invoice or receipt from service on an engine that includes the installation of bulk vehicle engine (motor) oil dispensed from a receptacle, dispenser, or storage tank shall bear a plainly visible cautionary statement in compliance with the latest version of SAE J183, Appendix A, whenever the vehicle engine (motor) oil in the container or in bulk does not meet an active API service category as defined by the latest version of SAE J183, "Engine Oil Performance and Engine Service Classification (Other than "Energy Conserving~~")." If a vehicle engine (motor) oil is identified as only meeting a vehicle or engine manufacturer standard, the labeling requirements in Section 2.33.1.3.1. Vehicle or Engine Manufacturer Standard applies.~~ **Marketing of engine oils corresponding to obsolete performance categories as defined in SAE J183 is expressly forbidden, except for antique vehicles requiring non-detergent motor oils corresponding to API Service Categories SA or SB. Marketers and/or Retailers of products corresponding to API Service Categories SA and SB must take judicious steps to ensure that these products are targeted to the engines intended to receive these materials. Such steps should include confinement of these products away from retail shelves featuring engine oils meeting current Service Categories. Containers used in retail trade (such as bottles, jugs, pails, drums) are explicitly targeted by this legislation. Beyond product controls, the minimum labeling standard for compliance with this requirement requires the marketer to print one of the following statements, in accordance with the Category claimed, in letters not less than 6.35 mm (1/4 in) in height on the front label of any product marketed under API Service Categories SA and SB:**

(Amended 2014**, 20XX**)

2.33.1.3.2.a API SA Category. – WARNING: THIS PRODUCT IS NOT SUITABLE FOR USE IN MOST GASOLINE-POWERED AUTOMOTIVE ENGINES BUILT AFTER 1930.

2.33.1.3.2.b API SB Category: – WARNING: THIS PRODUCT IS NOT SUITABLE FOR USE IN MOST GASOLINE-POWERED AUTOMOTIVE ENGINES BUILT AFTER 1951.

2.33.1.3.3. In addition to the minimum labeling standard described in 2.33.1.3.2, marketers shall include the full language expressing Service Category obsolescence in the latest edition of SAE J183 at time of manufacture.

2.33.1.3.3.a. API SA engine oils should bear the following text on the rear label, in letters not less than 3.18 mm (1/8 in) in height:

CAUTION: THIS OIL IS RATED API SA. IT CONTAINS NO ADDITIVES. IT IS NOT SUITABLE FOR USE IN MOST GASOLINE-POWERED AUTOMOTIVE ENGINES BUILT AFTER 1930. USE IN MODERN ENGINES MAY CAUSE UNSATISFACTORY ENGINE PERFORMANCE OR EQUIPMENT HARM.

2.33.1.3.3.b. API SB engine oils should bear the following text on the rear label, in letters not less than 3.18 mm (1/8 in) in height:

CAUTION: THIS OIL IS RATED API SB AND IS NOT SUITABLE FOR USE IN MOST GASOLINE-POWERED AUTOMOTIVE ENGINES BUILT AFTER 1951. USE IN MORE MODERN ENGINES MAY CAUSE UNSATISFACTORY PERFORMANCE OR EQUIPMENT HARM.

2.33.1.3.4 Motorcycles, where wet clutches are present in the design, may not operate properly with highly friction-modified engine oils. As a result, some motorcycle manufacturers recommend obsolete API Service Category oils (for example, API SG) in an attempt to avoid these friction-modified formulations. . All engine oils intended for the motorcycle market claiming obsolete Service cCtegories as defined within SAE J183 must be clearly identified with

"WARNING: FOR MOTORCYCLE USE ONLY" on the front label, in letters not less than 6.35 mm (1/4") in height.

2.33.1.3.5. If a vehicle engine (motor) oil is identified as only meeting a vehicle or engine manufacturer standard, the labeling requirements in Section 2.33.1.3.1. Vehicle or Engine Manufacturer Standard apply.

2.33.1.4. Tank Trucks or Rail Cars. – Tank trucks, rail cars, and other types of delivery trucks that are used to deliver bulk vehicle engine (motor) oil are not required to display the SAE viscosity grade and service category or categories on such tank trucks, rail cars, and other types of delivery trucks. **However, their bill of lading must clearly identify the product present in each compartment per 2.33.1.1.**

(Amended 2013**, ~~and~~** 2014 **and 20XX**)

2.33.1.5. Documentation. – When the engine (motor) oil is sold in bulk, an invoice, bill of lading, shipping paper, or other documentation must accompany each delivery. This document must identify the quantity of bulk engine (motor) oil delivered as defined in Sections 2.33.1.1. Viscosity; 2.33.1.2. Brand; 2.33.1.3. Engine Service Category; the name and address of the seller and buyer; and the date and time of the sale. For inactive or obsolete service categories, the documentation shall also bear a plainly visible cautionary statement as required in Section 2.33.1.3.2. Inactive or Obsolete Service Categories. Documentation must be retained at the retail establishment for a period of not less than one year.

(Added 2013) (Amended 2014)

(Added 2012) (Amended 2013 and 2014)

SWMA: Kevin Ferrick provided a presentation on behalf of ILMA. The NIST Technical Advisor remarked that parts of the proposal do not follow the HB130 formatting structure. She will work with the submitter on formatting prior to the 2018 NCWM Interim Meeting.

CWMA: The Committee supports this proposal and believes that the submitter intends to provide updated language for this item prior to the 2018 Interim Meeting. The CWMA recommended that this remain a Developing item.

NEWMA: Jeff Leiter representing the Independent Lubricant Manufacturers Association (ILMA) made a presentation regarding this item, which is intended to update Handbook 130 regulations regarding "obsolete oils". The submitter and NIST are working to have revised language ready for FALS to review at its meeting in January 2018. A state regulator from Pennsylvania questioned if enforcing types of obsolete engine oils is a weights and measures issue. He is concerned that regulators are challenged and constrained when enforcing these products since many of them are properly marked. He believes the consumer should be informed and able to determine if a particular engine oil sold at retail is appropriate for their vehicle. A state regulator from New York agrees. NEWMA believes this item deserves additional consideration and vetting by FALS and should move forward as an Informational item.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

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Return to the Item

PAL – UNIFORM PACKAGING AND LABELING REGULATION

PAL-2 Section 11.8. Packaged Commodities with Labeling Requirements Specified in Federal Laws. and Appendix C. Reference Information for Packaged

Commodities with Labeling Requirements Specified in Federal Laws and Regulations

Background/Discussion:
The current section was added to the Uniform Packaging and Labeling Regulation (UPLR) to alert the reader that the UPLR does not identify all the differences between the UPLR and Federal Regulations. This section notifies the reader that some products are subject to regulation by federal agencies, however, it does not identify the specific agency by product responsibility. This current proposal is to add additional product details and other useful information to Section 11.8. Packaged Commodities with Labeling Requirements Specified in Federal Law, because as it is currently written id does not include sufficient information on which agency regulates which products.

In addition, the proposed Table C. "Reference Information for Packaged Commodities with Labeling Requirements Specified in Federal Laws and Regulations" provides the identity of the specific agency overseeing the products listed, agency contact information, and specific reference(s) within the Code of Federal Regulations. This also updates the section to reflect that the regulation for tobacco is now under the Food and Drug Administration jurisdiction and the USDA now regulates "Catfish" (Siluriformes). Updating this section is to provide field inspectors with additional information on labeling resources they can refer to before acting on possible labeling violations. This is necessary as many jurisdictions have expanded their package inspection programs to include a wider range of products in a broader range of retail stores. Table C. will also assist industry users of the handbook in locating the labeling resources they need to ensure their products are labeled properly.

OWM does not anticipate opposition to this proposal as it adds clarifying information and useful research links to the UPLR.

Regional Association Comments:
WWMA: Lisa Warfield, NIST Technical Advisor, commented that this item is to add a chart that proposes a listing of agencies and what they regulate for the sake of clarity and convenience for inspectors. For instance, FDA now regulates tobacco and catfish. The Committee believes this item is fully developed and is ready for Voting status.

SWMA: Lisa Warfield (NIST Technical Advisor) remarked that the Tobacco and Trade Bureau (TTB) no longer regulates Tobacco. TTB only controls the taxing portion of tobacco. Tobacco is now regulated by FDA. In addition, they are the regulating agency for Siluriformes (catfish.) In addition, the proposal updates the Appendix C. chart to reflect the Product Agency Responsibility, a hyperlink to the Code of Federal Regulations (CFR) and provides a link that directs the user to the net quantity requirements, guides, or other useful information. The SWMA believes this item is ready for a Vote at the NCWM.

CWMA: An industry representative commented that this item is highlighting regulations that are outdated (such as metric references). He is concerned that putting outdated regulations in the Handbook could be facilitating details that could cause inspectors and state regulatory agencies enforcement challenges. The committee believes the table is helpful and provides a good reference to facilitate enforcement practices and recommended that it be a Voting item.

NEWMA: No comments were heard. NEWMA recommended this item move forward as a voting item.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

Return to the Item

MOS – UNIFORM REGULATION FOR THE METHOD OF SALE COMMODITIES

MOS-7 Section 1. Food Products and Section 2. Non-Food Products

Background/Discussion:
Much discussion and debate has been undertaken within the NCWM over the past two years regarding proposals for methods of sale of commodities (specifically, liquefied natural gas and compressed natural gas as vehicle fuels) based upon "equivalencies" to other methods of sale for different commodities (in these recent cases, based upon calculated average energy content comparisons to gasoline or diesel fuel). With the exception of a singular commodity, compressed natural gas, for which gasoline-liter-equivalent and gasoline-gallon-equivalent methods of sale were permitted some 20 years ago, the methods of sale for all other commodities have historically and consistently been established based upon legally-recognized units of weight or measure that are traceable to national standards maintained by NIST, the sole exceptions (found in interpretations and guidelines) being specific fresh vegetable commodities permitted to be sold by "head" or "bunch." Discussions surrounding considerations of "equivalency" units have raised the potential for untold similar proposals to establish methods of sale for countless competing products in the marketplace claiming comparisons of performance, quality, energy or nutritional content, or other factors that can be subjective, widely varying due to inconsistent chemical or biological makeup, or a host of other influences that are, or may be, based upon little to no scientific or metrologically sound and traceable determinations or calculations.

While a core tenet of weights and measures regulation and legal metrology – whether regarding design and function of weighing and measuring devices or sales of commodities - has always been widely recognized to require employment of units of measure that are recognized and published as legal for use and having metrological traceability, clear language in model laws and regulations developed by NCWM and published in NIST Handbooks is absent, likely never heretofore being deemed necessary due to the well-established, long-held tenet. This proposal serves to codify, memorialize, and specifically clarify that tenet as a formal adoption in the Uniform Regulation for the Method of Sale of Commodities to ensure against potentially misleading, confusing, or unclear business practices in commerce, whether in sales from bulk or in labeling of packaged commodities, that may be based upon observations, calculations, assumptions, or other considerations that may be subjective and not metrologically traceable.

At the 2016 NCWM Interim Meeting Kurt Floren (LA County) remarked that this would codify a long-standing practice. This item not intended to interfere with the current debate on liquefied natural gas (LNG). Mr. Floren encouraged the item on LNG to have a vote prior to this item. If the LNG proposal is adopted, this item could be amended from the floor of the conference. A former regulator remarked that Uniform Weights and Measures Law, Section (n) allows the term or unit of weight or measure be used if it is determined that an existing or firmly established practice. This proposal conflicts with Weights and Measures Law Section 12(n) that states this is a state function, not NIST controlled. The term on "traceability" is in NIST Handbook 130, Uniform Weights and Measures Law. NIST remarked that when changes are made to SP 811, "*The NIST Guide for use of International System of Units*" or NIST SP 330, "*The International System of Units (SI)*" it is required that a Federal Register notice be done.

The Committee is unclear as to what issue this proposal resolves. The Committee would also like to know what impact this would have for all items covered under the current Method of Sale of Commodities Regulation. The Committee agreed to move this forward as a Developing Item to allow the submitter to develop additional data and to have the Regions submit feedback. At the 2016 NCWM Annual Meeting there were no updates for the Committee.

At the 2017 NCWM Interim Meeting, Kurt Floren commented that this item was delayed pending the outcome of a former L&R Agenda Item pertaining to compressed natural gas. The Committee agreed unanimously that this is ready as a Voting item.

At the 2017 NCWM Annual Meeting, Mr. Floren submitted modified language to the Committee for consideration. This modified language due to the adoption of Section 2.27.1. Definitions and a minor modification to Section 1. Food Products (b) to state that it is at the discretion of the State Director. There were several voices that supported this item or concept. A retired New York regulator expressed his objection to this item in its entirety. He believes that the Uniform Regulation is specific for the items that have uniform methods of sale. He also stated that NCWM authority does not extend to impact all products and commodities. This item was returned to Committee for future consideration.

Regional Association Comments:
WWMA: Since the language was submitted close to the meeting date, and most Committee members and regional members did not have the chance to review the modified language, the Committee believes the item has merit and should be reviewed by regions prior to the Interim Meeting in January 2018. The modified language is listed above, and the Committee suggests it move forward for consideration as an Informational item.

SWMA: The SWMA reviewed the modified language and questions what legal ramifications does language in a preamble have? Is this the correct location for such language? If the submitter wants an item that is enforceable then the Committee would like an additional look at the placement of such. The SWMA is recommending this as an Informational item.

CWMA: The committee believes the item has been fully developed by the submitter, but some committee members are not clear why the wording is moved to the Preamble. There is also concern as to how far traceability goes (i.e. SI units including primary, secondary, etc.). The CWMA recommended that this be a Voting item.

NEWMA: The Chairman explained that the submitter has replaced the original language with new language which has been put onto the 2018 Interim section of the NCWM website. A retired state regulator from New York commented that each of the sections in the Handbook are reactionary to a specific circumstance. This item is a change in philosophy to establish constraints on methods of sale without a specific circumstance. A state regulator from Pennsylvania suggested that this language simply provides the ability for standardization of method of sale. However, states always have the right to override methods of sale established in the Handbook. An industry representative commented that he is unsure how putting this language into the preamble impacts regulation and enforcement. He commented that this provision might be better served as a standard rather than a regulation. He is concerned what precedent this language sets for weights and measures in relation to the businesses the agency regulates. After considerable discussion, the Committee recommends that this language be referred to PALS for placement into a "Best Practices" document PALS is currently working on. NEWMA recommended that this be an Informational item.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

Return to the Item

MOS-8 Section 2.13. Polyethylene Products

Background/Discussion:
The most efficient means for testing polyethylene products is by weight. The method of truncating the weight value to three digits is suitable for smaller consumer packages, but not for non-consumer products where packages often range in weights from 10 lb to more than 1,000 lb. As currently written, this section limits the calculated weight to three digits for all sizes of packages and will not accommodate heavier packages typically tested at wholesale or production sites. For example, a product with a calculated weight of 1,759 lb would be truncated to 1,750 lb, thus providing a 9 lb allowance. If adopted, the proposed language would correct this error.

At the 2017 NCWM Interim Meeting, Ms. Macey (CA) stated that this is important for the mil thickness of bags. The polyethylene test procedure was being reviewed and this change aligns with the test procedure. The Committee moved this forward as a Voting item.

At the 2017 NCWM Annual Meeting, Ms. Macey commented that the language submitted could be clarified. Ross Andersen (retired regulator) stated that when weight is required as part of the method of sale, the weight must be correct. The current formula is a minimum weight factor and is only good to a 1 % variance. Mr. Andersen recommends that the current language providing for three digits remain as is. He is recommending moving this and the test procedure forwarded, but provide examples in both the method of sale and test procedure. The NIST Technical Advisor remarked that he is seeking additional information from industry and recommends this be removed from voting status. The Committee concurred that additional work and vetting is needed for this item. For these reasons the Committee removed it from the Voting agenda and de-escalated the status to Informational.

Regional Association Comments:
WWMA: Lisa Warfield, NIST, commented that there is a group being led by NIST that consists of two polyethylene manufacturers and California Division of Measurement Standards to further develop this proposal. NIST also is reaching out to the NIST Statistical Engineering Division for technical review. NIST will update the Committee as information is determined. NIST recommends this as an Informational item. The WWMA recommended that this be an Informational item.

SWMA: The history for this proposal reflects there is concern as it is currently written. David Sefcik (NIST OWM) has been vetting and working on this proposal with industry and the submitter of the proposal regarding the concerns that have been documented. This small work group hopes to have a fully developed item by the 2018 NCWM Interim Meeting. In addition, NIST OWM will need additional time to submit this to the NIST Statistical Engineering Division to obtain feedback on the requirement of significant digits. The SWMA recommends this as an Informational item.

CWMA: NIST continues to work on this item with industry. The CWMA recommended that it be an Informational item.

NEWMA: A retired state regulator who serves on the working group commented that new language that addresses concerns with this issue is not included. The Chairman read an update from NIST, which indicated this item is still in progress and Informational status is recommended.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

Return to the Item

MOS-9 D Electric Watthour

This item has been assigned to the submitter for further development. For more information or to provide comment, please contact:

Tina Butcher
Chairman, NIST USNWG on Electric Vehicle Refueling and Submetering
(301) 975-2196, tbutcher@nist.gov

or

Juana Williams
Technical Advisor, NIST USNWG on Electric Vehicle Refueling and Submetering
(301) 975-3989, Juana.williams@nist.gov

Background/Discussion:
The creation of Developing Items on both the L&R and S&T Committee agendas will provide for a venue to allow the USNWG to update the weights and measures community on continued work to develop test procedures and test equipment standards. This item will also provide a forum for reporting on work to develop proposed method of sale requirements for electric watthour meters and a tentative device code for electric watthour meters in residential and

business locations and serve as a placeholder for eventual submission of these proposals for consideration by NCWM.

In 2012, NIST, OWM formed the U.S. National Working Group on Electric Vehicle Fueling and Submetering to develop proposed requirements for commercial electricity-measuring devices (including those used in sub-metering electricity at residential and business locations and those used to measure and sell electricity dispensed as a vehicle fuel) and to ensure that the prescribed methodologies and standards facilitate measurements that are traceable to the International System of Units (SI).

In 2013, the NCWM adopted changes recommended by the USNWG to the NIST Handbook 130 requirements for the Method of Sale of Commodities to specify the method of sale for electric vehicle refueling. At the 2015 NCWM Annual Meeting, the NCWM adopted NIST Handbook 44 Section 3.40. Electric Vehicle Refueling Systems developed by the USNWG.

This Developing item is included on the Committee's agenda (and a corresponding item is proposed for inclusion on the L&R Committee Agenda) to keep the weights and measures community apprised of USNWG current projects, including the following:

- The USNWG continues to develop recommended test procedures for inclusion in a new EPO 30 for Electric Vehicle Refueling Equipment along with proposed requirements for field test standards.

- The USWNG is continuing work to develop a proposed code for electricity-measuring devices used in sub-metering electricity at residential and business locations. This does not include metering systems under the jurisdiction of public utilities. The USNWG hopes to have a draft code for consideration by the community in the 2016-2107 NCWM cycle.

The U.S. National Work Group (USNWG) on Measuring Systems for Electric Vehicle Fueling and Submetering's Subgroup on Watthour Type Electric (WHE) Meters will meet (and by Tele/web conference) on September 12-14, 2017 in Sacramento, California to discuss the full development of a November 2014 version of a watthour meter draft code, intended to address legal metrology requirements for the device its minimum inspection and test procedures and test equipment, the appropriate method of sale of electricity through the device and an efficient process for achieving these goals. Additional discussion may include topics such as wireless technology, test procedures, traceability of test standards, and the subgroup's next steps; as well as the U.S. standards development process and timelines for other related projects.

The USNWG will provide regular updates on the progress of this work and welcomes input from the community.

Regional Association Comments:
WWMA: Lisa Warfield commented that the draft language for this item was developed at the Watthour Submetering USNWG September 13-15 in Sacramento, California. Since this language affects the State of California, it is requested that Ms. Macey vet the language with California counties prior to the Interim Meeting, 2018. Since the Committee was not able to view this language, they recommend it remain a Developing Item.

SWMA: The SWMA recommended that this item remain a Developing item.

CWMA: The Committee believes this item needs to be further developed by the submitter. The CWMA recommended that it remain a Developing item.

NEWMA: No comments were heard and NEWMA recommends that this item remain Developing.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

Return to the Item

MOS-10 Section 2.XX. – Pet Treats or Chews

Background/Discussion:
Add language to the method of sale for animal treats. Animal treats has been one of the fastest growing areas in the marketplace. However, there is considerable mislabeling in the marketplace. The NIST/OWM has numerous calls from inspectors and manufacturers as to the proper labeling for animal treats.

There could be some opposition from manufacturers. If this is the case, a labeling implementation date should be granted.

Regional Association Comments:
WWMA: This item did not appear as part of the original 2017 WWMA meeting agenda, but the Committee agreed to consider it, and believes it is fully developed and ready for Voting status.

SWMA: Pet treats or chews is one of the fastest growing marketplaces. States have noticed considerable mislabeled packaging for animal treats and chews. FDA does have federal regulations (refer to NCWM L&R Supporting Documents) that state, if the pet treats or chews have nutritional value they must be sold by net weight. This proposal will add a specific method of sale that clearly specifies what the method of sale is for pet treats and chews that have nutritional value. There is additional background information and a copy of the CFR on the NCWM Website. The SWMA believes this item is fully developed and recommends it as a Voting item.

CWMA: A Wisconsin regulator commented that she supports adding this language to Handbook 130. She says she had seen a variety of ways pet treats are sold – by count, by net weight, by size, etc. Net weight statements should be required. The CWMA recommended that this be a Voting item.

NEWMA: A retired state regulator from New York commented that this item was proposed to the wrong section of the Handbook. It should be placed into the Method of Sale section. He suggests we move it forward with Voting status, but put it into the correct section of Handbook 130. The retired regulator from New York suggests that the title add the word "net" before the last word "weight". NEWMA recommended it be a Voting item as amended here:

> **11.XX. – Pet Treats or Chews - Digestible chews, rawhides, bones, biscuits, antlers or similar type products that are defined as having nutritional value under FDA and 21 CFR 501 shall be sold by net weight.**

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

Return to the Item

FLR – UNIFORM ENGINE FUELS AND AUTOMOTIVE LUBRICANTS REGULATION

FLR-8 Section 4.1. Water in Retail Engine Fuel Storage Tanks ~~Gasoline-Alcohol Blends, Biodiesel Blends, Ethanol Flex Fuel, Aviation Gasoline, and Aviation Turbine Fuel and Section 4.2. Water in Gasoline, Diesel, Gasoline-Ether, and Other Fuels.~~

Background/Discussion:
All engine fuels degrade more rapidly in the presence of water, and can result in off spec product, microbial growth and internal corrosion of tanks and tank equipment. Besides impacting the quality of fuel such as when ethanol dissolves in water causing phase separation, affecting RVP and reducing AKI or octane number, the occurrence of microbial growth and corrosion particulates clog dispenser filters and affect other fuel clarity parameters. The fuels landscape has changed significantly across the country and currently almost all gasoline is blended with ethanol and

all diesel is now Ultra Low Sulfur Diesel with up to five percent biodiesel. This proposal provides a consistent best management practice with regard to managing water in any engine fuel utilizing current detection technology (water finding paste or other acceptable means), and also simplifies the handbook by eliminating the necessity for Section 4.2. Water in Gasoline, Diesel, Gasoline Ether, and Other Fuels.

At the 2016 NCWM Interim Meeting, Dr. Curran (FALS Chairman) remarked that FALS is forming a focus group lead by Mr. Albuquerque (CO) for developing this item. Bill Hornback (Chevron Products Co.) remarked that this is no way to detect ¼ in water. The Committee agrees that additional work needs to be done and recommends this as an Informational Item.

At the 2016 NCWM Annual Meeting, Mahesh Albuquerque (focus group chair) gave a presentation regarding water in fuel storage tanks. Mr. Albuquerque will continue to develop this item through the informational focus group and report back to FALS on their progress.

At the 2017 NCWM Interim Meeting, Mr. Mahesh Albuquerque provided an update to the FALS. Mr. Albuquerque noted that this proposal arose because there are two different requirements in the Handbooks regarding permissible levels of water in fuel storage tanks and he was looking to harmonize them to one quarter inch. He gave a presentation highlighting some of the research that has been conducted regarding the effects of water in fuel storage tanks. Much discussion ensued and one of the overarching lingering questions left before group was if this was worth the cost of implementation. The focus group plans to continue to evaluate this and other related questions in hopes to have a resolution ready to move forward in the near future.

Regional Association Comments:
WWMA: The Committee recommends further development and data gathering on this item as an Informational item, and looks forward to hearing results of the CRC study and the work of the focus group.

SWMA: The SWMA looks forward to hearing an update from Mr. Albuquerque (focus group chair).

CWMA: A representative from the National Biodiesel Board commented that she supports the concept of making requirements that all fuels have the same minimum water allowance. A Kansas regulator asked if there is data that quantifies whether there is an economic difference in mitigating free water levels such as ¼ inch versus 1 inch. Another representative from the NBB and the future ASTM D02 Chair commented that there are a number of studies from Battelle, CRC, EPA and many others show there is significant economic impact from free water and fuel. He commented that free water detected at any level needs to be addressed. A state regulator from Illinois asked whether biodiesel blends up to and including B5 would be considered a biofuel or petroleum fuel. A Kansas regulator asked the hygroscopic differences between biodiesel and petroleum diesel. The problem always results in free water, not in water absorbed in the fuel. A state regulator from Illinois commented that even without free water, there is water in the fuel that will degrade the fuel. A representative from BP commented she would like to see what comes out of the current CRC study. A state regulator from Missouri commented that filters would resolve many water issues in fuel. The CWMA recommended that this be an Informational item.

NEWMA: FALS continues to work on this issue through an informal work group and the submitter of the item. NEWMA recommends this item remain Informational.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

Return to the Item

FLR-9 G. Uniform ~~Engine~~ Fuels and Automotive Lubricants Regulation

Background/Discussion:
The NCWM Fuels and Lubricants Subcommittee formed a focus group in May 2015 to review Chapter G, Uniform Engine Fuels and Automotive Lubricants Regulation, of NIST Handbook 130 for areas and inconsistencies requiring updates. This item aims to align Chapter G with current Federal laws and regulations (except for those being

reviewed under separate item numbers), ASTM, and other consensus-based standards, as well as remove obsolete provisions of Federal regulations, making any technical changes that are needed to improve the timeliness and relevance of the document.

This item has the consensus of the Fuels and Lubricants Subcommittee; all comments have been adjudicated and participants have agreed to move forward with a much-improved document, requesting L&R to consider this as a voting item in 2018.

This information is repeated in Appendix B which contains the complete mark-up of the regulation.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

Return to the Item

POL – NCWM POLICY, INTERPRETATIONS AND GUIDELINES

POL-1 Section 2.6.17. Methods of Sale for Packages of Consumer Commodities – Federal Trade Commission and Acceptable Common or Usual Declarations for Packages of Food – Food and Drug Administration.

Background/Discussion:
This proposal is to provide NIST HB130 users with easy access to tables to identify the method of sales prescribed by the Federal Trade Commission (FTC) for products subject to that agency's regulation and the acceptable common or usual declarations permitted to appear on packages of food by the Food and Drug Administration. Much of this information has been published by FDA and FTC in out of print publications and by NBS/NIST in its training materials since the 1970s. The information is used by the Office of Weights and Measures in both training and daily to respond to inquiries from both weights and measures officials and industry about how products are to be sold and labeled. The tables have been revised to add current FTC labeling requirements which include requirements for metric units and additional common and usual declarations for commodities that FDA has issued in recent years in response to specific inquiries from OWM that submitted to FDA to assist packers and weights and measures officials. The FDA information is based on Guide 7699.2 in the Food and Drug Administrations "Fair Packaging and Labeling Manual" (June 1978) and other FDA guidance.

This information is useful to both packers and inspectors when determining how packages should be labeled and offered for sale. It has been available for many years in out of print publications and should be made widely available through this handbook.

NIST/OWM is also requesting editorial privileges to add items as they receive confirmation from FDA as to what the acceptable common or usual declaration for a product is. NIST/OWM will then automatically update the handbook (chart) and list all changes to the Amendment chart located in the front HB130.

Regional Association Comments:
SWMA: Chris Guay remarked that this is a great idea, but would like to add hyperlinks to direct the user to the supporting document or regulation within the table. Mr. Guay also remarked that consideration be given to locating this information on the NCWM website as a reference document. The SWMA L&R Committee understands that this is not a regulation and would be located within HB130, Interpretations and Guidelines section for the inspectors use. The Committee believes that this information should be kept within NIST Handbook 130 and not as a separate document. The Committee also agrees that NIST should have editorial privileges to add items as they confirm with FDA or other applicable agencies.

CWMA: An industry representative commented that he thought this item is a very good idea. He would like to see references and citations added to the table. The Committee requests that the submitter review the proposed table and

compare it with the current table in Handbook 130 to clarify the discrepancies and to ensure proper net content statements are used throughout the table. The CWMA recommended that it be a Developing item.

NEWMA: An industry representative commented he thought this is a good idea, and believes having a reference cited for each item would further improve the table. A state regulator from Maine commented that this item is very helpful. A state regulator from Westchester County, NY, commented that he supports this item as a great starting point. A retired state regulator asked the industry representative if he would prefer citing a specific regulation. The industry representative commented that the more specific the reference can be, the more helpful the information would be. A state regulator from New York commented that the table should also include the specific method of sale, such as listed in the table in HB 130, page 253, Table 2.6.8 in the appendix. NEWMA recommended this item as a voting item with additional citing and reference considerations.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

Return to the Item

NET – HANDBOOK 133

NET-2 1.2.6.1. Applying Moisture Loss

Background/Discussion:
The term, "reasonable moisture loss" is vague and without sufficient direction or definition to provide field staff with guidance on actions taken with respect to package weighing. The supreme court decision (Jones v. Rath Packing, 430 U.S. 519 - 1977) effectively required that officials must take into account "reasonable" moisture loss but this designation makes it difficult to defend such an action from claims of that said action is arbitrary and capricious. Logically this information would be accessible to the manufacturer; it's their plant and their customers in the distribution system. However, Jones v. Rath effectively put the onus on the weights and measures official who even if they had all the available information are still burdened with defending their actions. A set moisture coefficient would enable inspectors to meet the requirement while also allow impacted commodity manufacturers to submit materials to NCWM if an additional percentage is desired.

At this time owing to court cases (Jones v. Rath) reasonable allowance must be made for moisture loss. The problem has been that the provision was amorphous and vague, and the information may not be readily available. This situation has led to the current state of affairs that such actions taken in the field were subject to challenge as being arbitrary and capricious. "Reasonable" can be subjective and clear information about moisture loss can be illusive. Clear guidance needs to be established so that inspectors can be reasonable certain that actions taken, as long as they are consistent with Handbook 133, are defensible and not burdensome on the inspector or industry.

It can be argued that the average moisture loss should be 3% which if you examine the exempt items in HB 133 appears on average to be consistent with that number. However, this may allow a manufacturer to claim more than is justified based on examination of the product over time and conditions, unfairly impacting consumers, defacto allowing underfills because of the permissibility of the standard.

Regional Association Comments:
SWMA: There were several comments heard that there was no supporting data attached to the proposal. The Committee believes that this item does not have merit, nor does it have enough information to proceed. The SWMA is not forwarding this item to NCWM.

NEWMA: A state regulator from Connecticut and submitter of this item (Frank Greene) commented that it is an attempt to alleviate an arbitrary determination for weights and measures inspectors to determine acceptable moisture loss allowance. A state regulator from Hopkinton, MA is unsure that NCWM has the authority to adopt this provision (1.5% moisture loss). He believes the amount is arbitrary. The submitter recommends this item be

Informational status to gather additional comments and thoughts from others. An industry representative commented that the NCWM has a moisture allowance task group that is currently dormant. A retired state regulator from New York commented that the idea of using the manufacturer's data against them is not arbitrary. A state regulator from Pennsylvania commented that they ordered a manufacturer's product off sale and required them to prove data that supports the moisture loss allowance for that product is reasonable. The NCWM Chairman commented that he will contact the current chair of the moisture allowance task group. NEWMA believes this item should move forward as an Informational item that will be reviewed and further developed within the moisture loss task group.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

Return to the Item

NET-3 4.XX. Softwood Lumber

Background/Discussion
Currently there is not a test procedure for softwood lumber in NIST HB133. This procedure follows good measuring practices for products sold by linear measure. Over the past several years' states have requested guidance for a test procedure that determines the accuracy of softwood lumber. The test procedure was derived in part from the efforts of the California Division of Measurement Standards whose development and use over the years has shown reliable and repeatable results. This procedure was also developed with input provided from David Kretschmann, President, American Lumber Standards Committee (ALSC 7470 New Technology Way, Suite F, Frederick, MD 21703 PH: 301-972-1700 alsc.org) whose field representatives complete over 300 inspections a year to ensure self-compliance within their industry. ALSC field representatives validated the attached test procedure on 16 different size and types of softwood products.

Regional Association Comments:
WWMA: The Committee recommends this item as a Voting item.

SWMA: Lisa Warfield (NIST Technical Advisor) remarked that this new procedure provides inspectors with a HB133 test procedure for softwood lumber. This proposal has been vetted and developed with the American Lumber Standards Committee. The SWMA is recommending this as a Voting item at the NCWM.

CWMA: The CWMA did not take a position on this item.

NEWMA: A state regulator remarked that most jurisdictions will not have nor will it be necessary to have either a Vernier caliper or gage blocks for assessment of compliance with this commodity. A state regulator from New York commented that a steel tape would be a more appropriate standard for conducting inspections with this commodity. A retired state regulator from New York agrees. NEWMA believes this should move forward as an Informational item with a review of the inspection procedure.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

Return to the Item

NET-4 4.XX. Plywood and Wood-Based Structural Panels

Background/Discussion:
There is not a test procedure for plywood and wood-based structural panels in NIST HB133. This procedure follows good measuring practices for products sold by linear measure. Over the past several years' states have requested guidance for a test procedure that determines the accuracy of plywood and wood-based structural panels. This procedure was developed with the input from Steve Zylkowski, Director, Quality Services Division, Engineered Wood Association (APA). APA was previously known as the American Plywood Association. When

their name changed, it was decided to leave the acronym APA because it was so well established. (APA 7011 S. 19th Street, Tacoma, WA 98466 PH: (253) 620-6600 www.apawood.org.

Regional Association Comments:
WWMA: Lisa Warfield, NIST Technical Advisor, commented that the Voluntary Product Standards Group is meeting at the beginning of December, and may have changes to the following documents which could impact the test procedure - PS 1-09 "Structural Plywood" and the PS 2-10 "Performance Standard for Wood-Based Structural-Use-Panels". This item is not completely developed and should be placed as an Informational Item.

SWMA: Lisa Warfield (NIST Technical Advisor) remarked that NIST OWM worked with the Engineered Wood Association to develop this proposal. After NIST OWM submitted the Form 15 proposal, we were informed that there may be changes coming to PS1 and PS2. However, they are not meeting to discuss this until Dec. 6 & 7. If there are additional changes we will notify the L&R Committee at the 2018 NCWM Interim Meeting. The SMWA is recommending this as an Informational item.

CWMA: The CWMA did not take a position on this item.

NEWMA: A state regulator remarked that most jurisdictions will not have nor will it be necessary to have either a Vernier caliper or gage blocks for assessment of compliance with this commodity. A state regulator from New York commented that a steel tape would be a more appropriate standard for conducting inspections with this commodity. A retired state regulator from New York agrees. NEWMA believes this should move forward as a Developing item with a review of the inspection procedure with regard to practicality in the field.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

Return to the Item

NET-5 Appendix A: Tables 1.1. Agencies Responsible for Package Regulations and Applicable Requirements and 2.9. U.S. Department of Agriculture, Meat and Poultry, and Siluriformes Groups and Lower Limits for Individual Packages (Maximum Allowable Variations [MAVs])

Background/Discussion:
The Department of Agriculture, Food Safety and Inspection Service announced that Siluriformes include but are not limited to, ''catfish'' (fish of the family Ictaluridae) and ''basa'' and ''swai'' (fish of the family Pangasiidae). NIST Handbook 133 needs to be updated to inform the users of this federal regulation. This change impacts Appendix A, Table 1-1 Agencies Responsible for Package Regulations and Applicable Requirements and Table 2-9 U.S. Department of Agriculture, Meat and Poultry Groups and Lower Limits for Individual Packages (Maximum Allowable Variations [MAVs})

Regional Association Comments:
WWMA: The Committee believes this item is fully developed and recommends it move forward as a Voting Item.

SWMA: The NIST Technical Advisor remarked that this will update Appendix A. - Table 1.1., "Agencies Responsible for Responsibility Chart" to add that USDA Food Safety Inspection Service includes the responsibility of Siluriformes (catfish). In addition, we are requesting that MAV Table 2.9. add the term Siluriformes (catfish) to the title.

CWMA: The Committee believes this item is fully developed and ready for voting status. The Committee questioned why local weights and measures are included and state weights and measures are not included under Table 1-1 Agencies Responsible for Package Regulations and Applicable Requirements for tobacco enforcement. The CWMA recommended that it be a Voting item.

NEWMA: No comments were heard during the NEWMA 2017 Interim meeting. NEWMA believes this item has been fully developed and recommends Voting status.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

Return to the Item

NET-6 D Recognize the Use of Digital Density Meters

This item has been assigned to the submitter for further development. For more information or to provide comment, please contact:

Ronald Hayes
Missouri Department of Agriculture
(573-751-4316), ron.hayes@mda.mo.gov

Background/Discussion:
Current test procedures are slow and awkward due to the need of using borosilicate glassware for package checking. Digital density meters are fast, use small samples size (2 ml) and have built in thermometers.

Digital density meters are fast and accurate in comparison with recognized Handbook 133 test procedures for viscous fluids. Using digital density meters equipped with built-in API density tables will not require the cooling samples to 60 °F. There is no need to "wet down" volumetric flasks before each measurement. Most non-food products may be recovered without contamination. Only a small sample size (2 ml) of the product is needed for testing. There is no need for a partial immersion thermometer or volumetric flasks. The current method in "Section 3.4. Volumetric Test Procedures for Viscous Fluids – Headspace" does not work for plastic oblong bottles often used for motor oil. This new test procedure would eliminate the entrapment of air in testing viscous fluids (i.e. motor oil, DEF, antifreeze, syrups, etc.) Well established ASTM and other international standard test methods are available with precision statements.

At the 2016 NCWM Interim Meeting, Ron Hayes (Missouri) spoke in regards to his submittal of this proposal. The Committee believes this item has merit and requested that the submitter form a focus group to further develop. Mr. Hayes agreed that this item needs have additional data gathered to support the use and accuracy of the digital density meters. The American Petroleum Institute (API) remarked that they would like to assist the task group on this project. The Committee is making this a Developing Item.

At the 2017 Interim Meeting the submitter Ron Hayes (MO) asked for the states participation in a round robin to compare the current handbook test procedures with the density meter. The Committee encouraged the submitter to develop a proposal by Fall 2017.

Regional Association Comments:
WWMA: This item should remain as a Developing Item.

SWMA: This item should remain as a Developing Item.

CWMA: Ron Hayes, original submitter of this item, gave a presentation comparing test methods between the traditional flask method and digital density meters. The Committee believed that the concept has merit after watching the presentation during open hearings. The testing procedures are being developed and will be reviewed by NIST prior to voting by NCWM. The CWMA recommended that it remain a Developing item.

NEWMA: Since no proposal has come forward, the NEWMA recommends the item be withdrawn.
Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

Return to the Item

OTH – OTHER ITEMS

OTH-1 D Fuels and Lubricants Subcommittee

This item is to provide a report on the activities of the Fuels and Lubricants Subcommittee which reports and provides recommendations to the Laws and Regulations Committee. For more information or to provide comment, please contact:

Mr. Bill Striejewske, Chairman of the Fuels and Lubricants Subcommittee
Nevada Department of Agriculture/Bureau of Petroleum Technology
(775) 353-3792, email: wstriejewske@agri.state.nv.us

Background/Discussion:
The Subcommittee met on Sunday, January 8, 2017, at the NCWM Interim Meeting in San Antonio, TX to review a few significant issues related to fuel and automotive fluid standards appearing before the L&R Committee. The meeting began with an update from an agenda review teleconference, which was held on Tuesday, January 3, 2017. There were four items on the L&R agenda with two additional related items in the Method of Sale Section that were discussed by FALS. The meeting also consisted of updates from four focus groups working within FALS; further discussion on some of the agenda items; and several presentations from FALS members. Summaries of the focus groups are detailed below. Finally, the subcommittee discussed membership and voting guidelines that would be applied to agenda items and issues addressed within FALS.

The Subcommittee met on Sunday, July 16, 2017, at the NCWM Annual Meeting in Pittsburgh, PA to review several significant issues related to fuel and motor vehicle fluid standards appearing before the L&R Committee. The meeting began with an update from an agenda review teleconference, which was held on Thursday, June 8, 2017. There were four items on the L&R agenda with two additional related items in the Method of Sale Section that were discussed by FALS. Item 2307-2 related to Ethanol Flex Fuels was discussed at the meeting as the submitter was not able to attend the agenda review teleconference. The meeting also consisted of updates from the four focus groups working within FALS. Summaries are detailed below.

Handbook 130 Harmonization Focus Group: Mr. Randy Jennings commented that the focus group reviewed the latest draft proposal to Handbook 130 and the comments on the draft during a four hour call the previous week. Mr. Jennings will provide a revised document with changes based on the call for consideration to recommend as voting item at the 2018 NCWM Interim Meeting.

Renewable Diesel Labeling and Definitions Focus Group: Mr. Allan Morrison requested that the focus group resume work, but at the meeting FALS was informed that the focus group had not had a chance to meet since the request was made to resume work.

Premium Diesel Focus Group: Mr. Manuch Nickanjam (Chevron Global Downstream) gave a brief presentation on the efforts of focus group thus far noting that the group's work is nearly complete. Once complete the group will bring the work before the FALS membership for discussion and consideration.

Water in Storage Tanks Focus Group: Mr. Mahesh Albuquerque provided an update and revisited the intent if his proposal since it is related to current L&R agenda Item 2307-3. The intent of the proposal is to harmonize the permissible amount of water allowed in both blended and unblended fuel storage tanks. However, there has been many questions raised as to the benefit of moving forward in this direction. The focus group is working to address cost analysis issues as well as how effective such a change would be if implemented. (refer to Item 2307-3 for additional information)

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

Return to the Item

OTH-2 D Packaging and Labeling Subcommittee

This item is to provide a report on the activities of the Packaging and Labeling Subcommittee which reports and provides recommendations to the Laws and Regulations Committee. For more information or to provide comment, please contact:

Chris Guay, Chairman of the Packaging and Labeling Subcommittee
Procter and Gamble Co.
513-983-0530
guay.cb@pg.com

Background/Discussion:
The Package and Labeling Subcommittee (PALS) is comprised of four voting regulatory officials (one from each region) and four voting members from industry (retailers and manufacturers) in addition to its Chairman and NIST Technical Advisor. Mr. Guay, PALS Chair, reported that work is currently being held through monthly webinar meetings and at the NCWM meetings. Members of NCWM can participate in the PALS webinar meetings by contacting Mr. Guay. PALS members are responsible for providing updates at their Regional Meetings. Mr. Guay added that PALS will be developing proposals and providing guidance and recommendations on existing proposals as assigned by the NCWM L&R Committee. He also stressed the importance of having key federal agencies (FDA, FTC, and USDA) participating.

Mr. Guay reported the Subcommittee is working on a Recommended Practice Document for quantity expressions appearing on the principal display panel (PDP) in addition to the required statement of net quantity. In addition, PALS is considering further development of the following items:

- **Additional Net Content Declarations on the Principal Display Panel to Meet U.S. and International Requirements** - Package net contents are most commonly determined by the product form, for example – solid products are labeled by weight and liquid products are labeled by volume. Semi-solid products such as pastes, creams and viscous liquids are required to be labeled by weight in the United States and by volume in Canada.
- **Icons in Lieu of Words in Packaged labeled by Count** – Can a clear and non-misleading icon take the place of the word "count" or "item name" in a net content statement? While existing Federal regulation requires regulatory label information to be in "English," the increasing presence of multilingual labels and the growing diversity of the U.S. population suggest more consumers are served with a clear and non-misleading icon.
- **Multipacks and Bundle Packages** - The net content statements for multipacks and bundled packages of individually labeled products can be different based on the approach used to calculate them. The difference is the result of the degree of rounding for dual inch-pound and metric declarations. Using two apparently valid but different methods can yield one net content statement result, that provide better accuracy between the metric and inch-pound declarations and a different net content result which is consumer friendly.

At the 2016 NCWM Annual Meeting, Mr. Guay (PALS Chair) reported that the Subcommittee continues to address question and issues surfacing as the PALS subcommittee works on the Recommend Practice Document.

At the 2017 NCWM Interim Meeting, Ann Boeckman (PALS Member) provided a presentation to the PALS summarizing the history of the U.S. Fair Packaging and Labeling Act, FTC's FPLA regulations, and positions taken by FTC when questions were referred to the Agency. The PALS Committee is planning to contact FTC and FDA to discuss the how PALS can provide guidance to manufacturers consistent with FTC and FDA requirements and interpretations.

At the 2017 NCWM Interim Meeting Mr. Guay (PALS Chair) reported that PALS was making progress on a Recommended Practice Document for quantity-related statements appearing the package net content statement outside of the required statement of net quantity. He noted that no guidance or regulation exists for these types of statements and as a result, every manufacturer creates their own approach. A Recommended Practice Document is

expected to help bring uniformity and consistency by providing a reference for these types of label statements. This document will either be a stand-alone document on the NCWM website a NCWM publication.

At the 2017 Annual Meeting, PALS met with a representative of the FDA to provide a detailed overview of the background, development, and status of the developing Recommended Best Practice Document. While also invited, FTC was unable to attend this meeting. PALS is planning to continue development of this document and continue outreach to the Federal Agencies as it works to finalize the first draft of the document. PALS plans to share the Best Practice Document with NCWM members for input once the draft is complete.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.net/meetings/interim/publication-15 to review these documents.

Return to the Item

Appendix B

Agenda Item FLR-9

G. Uniform Engine Fuels and Automotive Lubricants Regulation

The NCWM Fuels and Lubricants Subcommittee formed a focus group in May 2015 to review Chapter G, Uniform Engine Fuels and Automotive Lubricants Regulation, of NIST Handbook 130 for areas and inconsistencies requiring updates. This item aims to align Chapter G with current Federal laws and regulations (except for those being reviewed under separate item numbers), ASTM, and other consensus-based standards, as well as remove obsolete provisions of Federal regulations, making any technical changes that are needed to improve the timeliness and relevance of the document.

This item has the consensus of the Fuels and Lubricants Subcommittee; all comments have been adjudicated and participants have agreed to move forward with a much-improved document, requesting L&R to consider this as a voting item in 2018.

G. Uniform ~~Engine~~ Fuels and Automotive Lubricants Regulation

as adopted by
The National Conference on Weights and Measures*

1. Background

In 1984, the National Conference on Weights and Measures (NCWM) adopted a Section 2.20. in the Uniform Regulation for the Method of Sale of Commodities requiring that motor fuels containing alcohol be labeled to disclose to the retail purchaser that the fuel contains alcohol. The delegates deemed this action necessary since motor vehicle manufacturers were qualifying their warranties with respect to some gasoline-alcohol blends, motor fuel users were complaining to weights and measures officials about fuel quality and vehicle performance, and ASTM International (ASTM) had not yet finalized quality standards for oxygenated (which includes alcohol-containing) fuels. While a few officials argued weights and measures officials should not cross the line from quantity assurance programs to programs regulating quality, the delegates were persuaded that the issue needed immediate attention.

A Motor Fuels Task Force was appointed in 1984 to develop mechanisms for achieving uniformity in the evaluation and regulation of motor fuels. The Task Force developed the Uniform Motor Fuel Inspection Law (see the Uniform Engine Fuels and Automotive Lubricants Inspection Law section of this handbook) and the Uniform Engine Fuel and Automotive Lubricants Regulation to accompany the law. The Uniform Law required registration and certification of motor fuel as meeting ASTM standards. The regulation defined the ASTM standards to be applied to motor fuel.

In 1992, the NCWM established the Petroleum Subcommittee under the Laws and Regulations Committee. The subcommittee recommended major revisions to the Regulation that was adopted at the 80th NCWM in 1995. The scope of the regulation was expanded to include all engine fuels, petroleum products, and automotive lubricants; its title was changed accordingly; and the fuel specifications and method of sale sections were revised to address the additional products. Other changes included expansion of the definitions section and addition of sections on retail storage tanks, condemned product, registration of engine fuels designed for special use, and test methods and reproducibility limits.

In 2007, the Petroleum Subcommittee (now referred to as the Fuels and Lubricants Subcommittee) undertook a review of this regulation to update it by eliminating reference to "petroleum products" and to reflect the addition of new engine fuels to the marketplace. **The regulation continues to be updated to incorporate new regulatory requirements and other key changes.**

~~**At the 2008 NCWM Interim Meeting, the Laws and Regulations Committee changed the Petroleum Subcommittee's name to the Fuels and Lubricants Subcommittee (FALS) in recognition of its work with a wide variety of fuels including petroleum and biofuels.**~~

(Amended 20XX)

2. Status of Promulgation

The Uniform Regulation for Engine Fuels and Automotive Lubricants was adopted by the NCWM in 1995. The status of state actions with respect to this Regulation is shown in the table beginning on page 6.

(Amended 2008)

**The National Conference on Weights and Measures (NCWM) is supported by the National Institute of Standards and Technology (NIST) in partial implementation of its statutory responsibility for "cooperation with the states in securing uniformity in weights and measures laws and methods of inspection."*

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Uniform ~~Engine~~ Fuels and Automotive Lubricants Regulation

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Uniform ~~Engine~~ Fuels and Automotive Lubricants Regulation

Section 1. Definitions

1.1. ASTM (ASTM International). ~~ASTM International.~~ (www.astm.org) – The international voluntary consensus standards organization formed for the development of standards on characteristics and performance of materials, products, systems, and services, and the promotion of related knowledge.
(Amended 20XX)

1.2. Antiknock Index (AKI). – The arithmetic average of the Research Octane Number (RON) and Motor Octane Number (MON): AKI = (RON+MON)/2. This value is called by a variety of names, in addition to antiknock index, including: octane rating, posted octane, (R+M)/2 octane.

1.3. Automatic Transmission Fluid. – A product intended for use in a passenger vehicle, other than a bus, as either lubricant, coolant, or liquid medium in any type of fluid automatic transmission that contains a torque converter. For the purposes of this regulation, fluids intended for use in continuously variable transmissions are not considered "Automatic Transmission Fluid."
(Added 2004)

1.4. Automotive Fuel Rating. – The automotive fuel rating required under the amended **~~Octane Certification and Posting Rule~~ Automotive Fuel Ratings, Certification and Posting Rule** (or as amended, the Fuel Rating Rule), 16 CFR Part 306. Under this Rule, sellers of liquid automotive fuels, including alternative fuels, must determine, certify, and post an appropriate automotive fuel rating. The automotive fuel rating for gasoline **and gasoline-oxygenate blends** is the antiknock index (octane rating). The automotive fuel rating for alternative liquid **automotive** fuels consists of the common name of the fuel, along with a disclosure of the amount, expressed as a minimum volume percent of the principal component of the fuel. For alternative liquid automotive fuels, a disclosure of other components, expressed as a minimum volume percent, may be included, if desired.
(Amended 20XX)

1.5. Automotive Gasoline, Automotive Gasoline-Oxygenate Blend. – A type of fuel suitable for use in spark ignition automobile engines **containing small amounts of fuel additives** and also commonly used in marine and non-automotive applications.
(Amended 20XX)

1.6. Aviation Gasoline. – A type of gasoline suitable for use as a fuel in an aviation spark-ignition internal combustion engine.

1.7. Aviation Turbine Fuel. – A refined middle distillate suitable for use as a fuel in an aviation gas turbine internal combustion engine.

~~1.8. Base Gasoline. – All components other than ethanol in a blend of gasoline and ethanol.~~

1.~~9~~8. Biodiesel. – A fuel comprised of **at least 99% by volume** mono-alkyl esters of long chain fatty acids derived from vegetable oils or animal fats, designated B100 **or B99**.
(Amended 20XX)

1.~~10~~9. Biodiesel Blend. – A fuel comprised of a blend of biodiesel **with hydrocarbon diesel fuel. ~~fuel with petroleum-based diesel fuel, designated BXX. In the abbreviation BXX, (e.g., B20) represents the volume percentage of biodiesel fuel in the blend.~~**
(Amended 20XX)

1.10. Butanol. – Butyl alcohol, the chemical compound C_4H_9OH, a colorless substance existing in four isomeric forms.
(Added 20XX)

1.11. Cetane Number. – A numerical measure of the ignition performance of a diesel fuel obtained by comparing it to reference fuels in a standardized engine test.

1.12. Compressed Natural Gas (CNG). – Natural gas which has been compressed and dispensed into fuel storage containers and is suitable for use as an engine fuel.

1.13. Denatured Fuel Ethanol. – An ethanol blend component for use in gasoline-ethanol blends and ethanol flex fuel. The ethanol is rendered unfit for beverage use by the addition of denaturants under formulas approved by the Alcohol and Tobacco Tax and Trade Bureau (TTB) (**www.ttb.gov**), by the latest version of ASTM D4806, "Standard Specification for Denatured Fuel Ethanol for Blending with Gasolines for Use as Automotive Spark Ignition Engine Fuel" describes the acceptable denaturants for denatured fuel ethanol to be blended into spark ignition engine fuels.
(Amended 2014)

1.14. Diesel Exhaust Fluid (DEF). – A preparation of aqueous urea [(NH2)2CO], containing 32.5 % by mass of technically-pure urea in high-purity water with quality characteristics defined by the latest version of ISO 22241, "Diesel engines – NOx reduction agent AUS 21."

(Added 2014)

1.15. Diesel Fuel. – A refined ~~middle distillate~~ **hydrocarbon** suitable for use as a fuel in a compression-ignition (diesel) internal combustion engine**, that may contain a combination of biodiesel, renewable diesel, and fuel additives.**
(Amended 20XX)

1.16. Director. – The Director, Commissioner or other authority having jurisdiction over a Department and/or their designated agent(s).
(Added 20XX)

1.~~16~~17. Distillate. – Any product obtained by condensing the vapors given off by boiling petroleum or its products.

1.~~17~~18. EPA. – The United States Environmental Protection Agency (**www.epa.gov**).

1.19 Energy Institute (EI). – A professional organization for the energy industry, developing standards and other technical documents.

1.~~18~~20. Engine Fuel. – Any liquid or gaseous matter used for the generation of power in an internal combustion engine.

1.~~19~~21. Engine Fuels Designed for Special Use. – Engine fuels designated by the Director as requiring registration. These fuels normally do not have ASTM or other national consensus standards applying to their quality or usability; common special fuels are racing fuels and those intended for agricultural and other off-road applications.

1.~~20~~22. Ethanol. – Also known as "ethyl alcohol." Ethanol is provided in gasoline-ethanol blends by blending denatured fuel ethanol. See Section 1.13 Denatured Fuel Ethanol.

(Amended 2014)

1.~~21~~23. Ethanol Flex Fuel. – Blends of ethanol and hydrocarbons restricted for use as fuel in ground vehicles equipped with flexible-fuel spark-ignition engines.

(Amended 2014)

1.24. Flexible-Fuel Vehicle. – A vehicle designed to operate on either unleaded gasoline or ethanol flex fuel or mixtures of both. Flexible-Fuel Vehicles may also be designed to run on M85 Fuel Methanol.

(Added 20XX)

1.25. Fuel Additive. – A material added to a fuel in small amounts to impart or enhance desirable properties or to suppress undesireable properties.
(Added 20XX)

1.~~22~~26. Fuel Cell. – An electrochemical energy conversion device in which fuel and an oxidant react to generate electricity without consumption, physically or chemically, of its electrodes or electrolytes.
(Added 2012)

1.~~23~~27. Fuel Oil. – Refined oil middle distillates, heavy distillates, or residues of refining, or blends of these, suitable for use as a fuel for heating or power generation**~~, the classification of which shall be defined by the latest version of ASTM D396~~**.

1.~~24~~28. Gasoline. – A volatile mixture of liquid hydrocarbons ~~generally~~ containing small amounts of additives suitable for use as a fuel in a spark-ignition internal combustion engine.

~~1.25. Gasoline-Alcohol Blend. A fuel consisting primarily of gasoline and a substantial amount (more than 0.35 mass percent of oxygen, or more than 0.15 mass percent of oxygen if methanol is the only oxygenate) of one or more alcohols.~~

~~1.26. Gasoline Gallon Equivalent (GGE). – Equivalent to 2.567 kg (5.660 lb) of natural gas.~~

~~1.27. Gasoline Liter Equivalent (GLE). Equivalent to 0.678 kg (1.495 lb) of natural gas.~~

1.~~28~~29. Gasoline-Oxygenate Blend. – A fuel consisting primarily of gasoline along with a substantial amount (more than **~~0.35 mass percent of oxygen~~ 1% by volume oxygenate**, or more than **~~0.15 mass percent of oxygen if~~ 0.3% by volume** methanol**) ~~is the only oxygenate) of one or more oxygenates.~~ not to exceed the total oxygen content permitted by applicable laws and regulations. Examples of oxygenates used in gasoline-alcohol blends are ethanol and butanol.**
(Amended 20XX)

1.~~29~~30. Gear Oil. – An oil used to lubricate gears, axles, or some manual transmissions.
(Added 2004)

1.~~30~~31. Hydrogen Fuel. – A fuel composed of molecular hydrogen intended for consumption in a surface vehicle or electricity production device with an internal combustion engine or fuel cell.
(Added 2012)

1.~~31~~32. Internal Combustion Engine. – A device used to generate power by converting chemical energy bound in the fuel via spark-ignition or compression ignition combustion into mechanical work to power a vehicle or other device.
(Added 2012)

1.33. International Organization for Standardization (ISO). – An independent international organization with a membership of national standards bodies.

1.~~32~~34. Kerosene. – (or "Kerosine") A refined middle distillate suitable for use as a fuel for heating or illuminating**~~, the classification of which shall be defined by the latest version of ASTM D3699, "Standard Specification for Kerosine."~~**
(Amended 20XX)

1.~~33~~35. Lead Substitute. – An EPA-registered gasoline additive suitable, when added in small amounts to fuel, to reduce or prevent exhaust valve recession (or seat wear) in automotive spark-ignition internal combustion engines designed to operate on leaded fuel.

1.~~34~~36. Lead Substitute Engine Fuel. – For labeling purposes, a gasoline or gasoline-oxygenate blend that contains a "lead substitute".

~~**1.35. Leaded. For labeling purposes, any gasoline or gasoline-oxygenate blend which contains more than 0.013 g of lead per liter (0.05 g lead per U.S. gal).** ***NOTE: EPA defines leaded fuel as one which contains more than 0.0013 g of phosphorus per liter (0.005 g per U.S. gal), or any fuel to which lead or phosphorus is intentionally added.***~~

1.~~36~~37. Liquefied Natural Gas (LNG). – Natural gas that has been liquefied at – 162 ºC (– 260 ºF) and stored in insulated cryogenic tanks for use as an engine fuel.
(Amended 2016)

1.~~37~~38. Liquefied Petroleum Gas (LPG). – A mixture of normally gaseous hydrocarbons, predominantly propane, or butane, or both, that has been liquefied by compression or cooling, or both to facilitate storage, transport, and handling.

1.~~38~~39. Low Temperature Operability. – A condition which allows the uninterrupted operation of a diesel engine through the continuous flow of fuel throughout its fuel delivery system at low temperatures. Fuels with adequate low temperature operability characteristics have the ability to avoid wax precipitation and clogging in fuel filters.
(Added 1998) (Amended 1999)

1.~~39~~40. Lubricant. – Oil. (See ~~**1.45.**~~ **1.44.** Oil below.).
(Added 2008)

1.~~40~~41. Lubricity. – A qualitative term describing the ability of a fluid to affect friction between, and wear to, surfaces in relative motion under load.
(Added 2003)

1.~~41~~42. M85 Fuel Methanol. – A blend of methanol and hydrocarbons of which the methanol portion is nominally 70 to 85 volume percent.

1.~~42~~43. Motor Octane Number. – A numerical indication of a spark-ignition engine fuel's resistance to knock obtained by comparison with reference fuels in a standardized ASTM D2700, "Motor Method Engine Test."

1.~~43~~44. Motor Oil. – An oil that reduces friction and wear between the moving parts within a reciprocating internal combustion engine and also serves as a coolant. For the purposes of this regulation, "vehicle motor oil" refers to motor oil which is intended for use in light- to heavy-duty vehicles including cars, sport utility vehicles, vans, trucks, buses, and off-road farming and construction equipment. For the purposes of this regulation, "recreational motor oil" refers to motor oil which is intended for use in four-stroke cycle engines used in motorcycles, ATVs, and lawn and garden equipment. For the purposes of this regulation, motor oil also means engine oil.
(Added 2004)

1.~~44~~45. MTBE. – Methyl tertiary-butyl ether, **the chemical compound $(CH_3)_3COCH_3$ $[C_5H_{12}O]$.**
(Added 2008) **(Amended 20XX)**

1.~~45~~46. Oil. – A motor oil, engine oil, and/or gear oil.
(Added 2004)

1.~~46~~47. Oxygen Content of Gasoline. – The percentage of oxygen ~~by mass~~ contained in a gasoline.

1.~~47~~48. Oxygenate. – An oxygen-containing, ashless, organic compound, such as an alcohol or ether, which can be used as a fuel or fuel supplement.

1.49. Racing Gasoline. – A specialty fuel typically used in non-road racing vehicles that is generally of lower volatility, has a narrower boiling range and a higher octane rating than gasolines made for use in conventional passenger vehicles.
(Added 20XX)

~~**1.48. Reformulated Gasoline (RFG). A gasoline or gasoline-oxygenate blend certified to meet the specifications and emission reduction requirements established by the Clean Air Act Amendments of 1990, as amended by the Energy Policy Act of 2005, required to be sold for use in automotive vehicles in extreme and severe ozone non-attainment areas and those areas which opt to require reformulated gasoline.**~~
~~**(Amended 2008)**~~

1.49~~5~~0. Research Octane Number. – A numerical indication of a spark-ignition engine fuel's resistance to knock obtained by comparison with reference fuels in a standardized ASTM D2699, "Research Method Engine Test."

1.50~~5~~1. SAE (SAE International). – A technical organization for engineers, scientists, technicians, and others who cooperate closely in the engineering, design, manufacture, use, and maintainability of self-propelled vehicles.

~~**1.51. Substantially Similar. Refers to the EPA's "Substantially Similar" rule, Section 211 (f) (1) of the Clean Air Act [42 U.S.C. 7545 (f) (1)].**~~

1.52. Therm~~a~~l Stability. – The ability of a fuel to resist the thermal stress which is experienced by the fuel when exposed to high temperatures in a fuel delivery system. Such stress can lead to formation of insoluble gums or organic particulates. Insolubles (e.g., gums or organic particulates) can clog fuel filters and contribute to injector deposits.
(Added 1998) (Amended 1999 **and 20XX**)

1.53. Unleaded. – When used in conjunction with "engine fuel" or "gasoline" means any gasoline or gasoline-oxygenate blend to which no lead or phosphorus compounds have been intentionally added and which contains not more than 0.013 g of lead per liter (0.05 g lead per U.S. gallon) and not more than 0.0013 g of phosphorus per liter (0.005 g phosphorus per U.S. gallon).

1.54. Wholesale Purchaser Consumer. – Any person who is an ultimate consumer of gasoline, fuel methanol, ethanol flex fuel, diesel fuel, biodiesel, biodiesel blends, fuel oil, kerosene, aviation turbine fuels, natural gas, compressed natural gas, or liquefied petroleum gas and who purchases or obtains the product from a supplier and receives delivery of that product into a storage tank.
(Added 1998) (Amended 1999 and 2014)

Section 2. Standard ~~Fuel~~ Specifications

2.1. Gasoline and Gasoline-Oxygenate Blends.

2.1.1. Gasoline and Gasoline-Oxygenate Blends (as defined in this regulation)**.** – Shall meet the latest version of ASTM D4814, "Standard Specification for Automotive Spark-Ignition Engine Fuel" except for the permissible offsets for ethanol blends as provided in Section 2.1.2. Gasoline-Ethanol Blends.
(Added 2009)

(a) The maximum concentration of oxygenates contained in gasoline-oxygenate blends shall not exceed those permitted by the EPA under Section 211 of the Clean Air Act and applicable waivers.

(Added 20XX)

2.1.2. Gasoline-Ethanol Blends. – When gasoline is blended with **denatured fuel** ethanol, the **denatured fuel** ethanol shall meet the latest version of ASTM D4806, "Standard Specification for Denatured Fuel Ethanol for

Blending with Gasolines for Use as Automotive Spark-Ignition Engine Fuel," and the blend shall meet the latest version of ASTM D4814, "Standard Specification for Automotive Spark-Ignition Engine Fuel," with the following permissible exceptions:

(a) The maximum vapor pressure shall not exceed the ASTM D4814 limits by more than:

(1) 1.0 psi for blends containing 9 to 10 volume percent ethanol from June 1 through September 15 **as allowed by the EPA.**

~~(2) 1.0 psi for blends containing one or more volume percent ethanol for volatility classes A, B, C, D from September 16 through May 31.~~

~~(3) 0.5 psi for blends containing one or more volume percent ethanol for volatility Class E from September 16 through May 31.~~

~~The vapor pressure exceptions in subsections 2.1.2. Gasoline-Ethanol Blends will remain in effect until May 1, 2017, or until ASTM incorporates changes to the vapor pressure maximums for ethanol blends, whichever occurs earlier. (Effective July 28, 2016)~~

~~(Amend 2016)~~

~~*NOTE 1: The temperature values (e.g., 54 °C, 50. °C, 41.5 °C) are presented in the format prescribed in ASTM E29 "Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications."*~~

NOTE ~~2~~ 1: *The values shown above appear only in U.S. customary units to ensure that the values are identical to those in ASTM standards and the Environmental Protection Agency regulation.*

(Added 2009) (Amended 2012 and 2016)

2.1.3. Minimum Antiknock Index (AKI). – The AKI shall not be less than the AKI posted on the product dispenser or as certified on the invoice, bill of lading, shipping paper, or other documentation;

2.1.4. Minimum Motor Octane Number. – The minimum motor octane number shall not be less than 82 for gasoline with an AKI of 87 or greater;

~~**2.1.5. Minimum Lead Content to Be Termed "Leaded." Gasoline and gasoline oxygenate blends sold as "leaded" shall contain a minimum of 0.013 g of lead per liter (0.05 g per U.S. gallon);**~~

2.1.~~6~~5. Lead Substitute Gasoline. – Gasoline and gasoline-oxygenate blends sold as "lead substitute" gasoline shall contain a lead substitute which provides protection against exhaust valve seat recession equivalent to at least 0.026 g of lead per liter (0.10 g per U.S. gallon).

2.1.~~6~~5.1. Documentation of Exhaust Valve Seat Protection. – Upon the request of the Director, the lead substitute additive manufacturer shall provide documentation to the Director that demonstrates that the treatment level recommended by the additive manufacturer provides protection against exhaust valve seat recession equivalent to or better than 0.026 g/L (0.1 g/gal) lead. The Director may review the documentation and approve the lead substitute additive before such additive is blended into gasoline. This documentation shall consist of:

(a) test results as published in the Federal Register by the EPA Administrator as required in Section 211(f)(2) of the Clean Air Act; or

(b) until such time as the EPA Administrator develops and publishes a test procedure to determine the additive's effectiveness in reducing valve seat wear, test results and description of the test procedures used in comparing the effectiveness of 0.026 g per liter lead and the recommended treatment level of the lead substitute additive shall be provided.

2.1.~~7~~6. Blending. – Leaded, lead substitute, and unleaded gasoline-oxygenate blends shall be blended according to the EPA "substantially similar" rule or an EPA waiver for unleaded fuel.

(Amended 2009)

2.2. Diesel Fuel. – Shall meet the **~~latest version of ASTM D975, "Standard Specification for Diesel Fuel Oils."~~ following requirements, based on the biodiesel concentration of the fuel:**

(a) Diesel fuel that contains less than or equal to 5% by volume biodiesel shall meet the latest version of ASTM D975, "Standard Specification for Diesel Fuel Oils" and shall be sold as diesel fuel. (Added 20XX)

(b) Diesel fuel that contains greater than or equal to 6% by volume biodiesel and that contains less than or equal to 20% by volume shall meet the latest version of ASTM D7467, "Standard Specification for Diesel Fuel Oil, Biodiesel Blend (B6 to B20)." (Added 20XX)

(c) Only fuel additives registered with the US EPA may be used to additize diesel fuel and the final product must meet ASTM D975 and/or ASTM D7467. (Added 20XX)

(Amended 20XX)

2.2.1. Premium Diesel Fuel. – All diesel fuels identified on retail dispensers, bills of lading, invoices, shipping papers, or other documentation with terms such as premium, super, supreme, plus, or premier must conform to the following requirements:

(a) **Cetane Number.** – A minimum cetane number of 47.0 as determined by the latest version of ASTM D613, "Standard Test Method for Cetane Number of Diesel Fuel Oil."

(b) **Low Temperature Operability.** – A cold flow performance measurement which meets the latest version of ASTM D975, "Standard Specification for Diesel Fuel Oils," tenth percentile minimum ambient air temperature charts and maps by either ASTM Standard Test Method D2500 (Cloud Point) or the latest version of ASTM Standard D4539, "Low Temperature Flow Test, LTFT." Low temperature operability is only applicable October 1 to March 31 of each year.

(c) **Thermal Stability.** – A minimum reflectance measurement of 80 % as determined by the latest version of ASTM Standard Test Method D6468 (180 min, 150 °C).

(d) **Lubricity.** – A maximum wear scar diameter of 520 micrometers as determined by the latest version ASTM D6079, "Standard Test Method for Evaluating Lubricity of Diesel Fuels by the High-Frequency Reciprocating Rig (HFRR)." If an enforcement jurisdiction's single test of more than 560 micrometers is determined, a second test shall be conducted. If the average of the two tests is more than 560 micrometers, the sample does not conform to the requirements of this part.

(Amended 2003)

2.3. Aviation Turbine Fuels. – Shall meet the latest version of **~~ASTM D1655, "Standard Specification for Aviation Turbine Fuels."~~ the following standards, as appropriate:**

(a) ASTM D1655 – "Standard Specification for Aviation Turbine Fuels." (Added 20XX)

(b) ASTM D6615 – "Standard Specification for Jet B Wide-Cut Aviation Turbine Fuel." (Added 20XX)

(c) ASTM D7223 – "Standard Specification for Aviation Certification Turbine Fuel." (Added 20XX)

(d) ASTM D7566 – "Standard Specification for Aviation Turbine Fuel Containing Synthesized Hydrocarbons."
(Added 20XX)

(Amended 20XX)

2.4. Aviation Gasoline. – Shall meet the latest version of one of the following, as appropriate:

(a) **ASTM D910** – "Standard Specification for **Leaded** Aviation Gasoline**;**" ~~or~~

(b) **ASTM D6227** – "Standard Specification for Grade 82 Unleaded Aviation Gasoline~~.~~**;**" **or**

(c) ASTM D7547 – "Standard Specification for Hydrocarbon Unleaded Aviation Gasoline."
(Added 20XX)

(Amended 2008 **and 20XX**)

2.5. Fuel Oils. – Shall meet the latest version of ASTM D396, "Standard Specification for Fuel Oils."

2.6. Kerosene (Kerosine). – Shall meet the latest version of ASTM D3699, "Standard Specification for Kerosine."

2.7. Denatured Fuel Ethanol. – Intended for blending with gasoline shall meet the latest version of ASTM D4806, "Standard Specification for Denatured Fuel Ethanol for Blending with Gasolines for Use as Automotive Spark-Ignition Engine Fuel."
(Amended 2014)

2.8. Liquefied Petroleum (LP) Gases. – Shall meet the latest version ASTM D1835, "Standard Specification for Liquefied Petroleum (LP) Gases."

NOTE: *Also reference Gas Processors Association 2140, Liquefied Petroleum Gas Specification and Test Methods.*

2.9. Liquefied Natural Gas (LNG) Vehicle Fuel. – Shall meet the latest version of SAE J2699, "Liquefied Natural Gas (LNG) Vehicle Fuel."

2.~~9~~10. Compressed Natural Gas (CNG). – Shall meet the latest version of SAE J1616, "Recommended Practice for Compressed Natural Gas Vehicle Fuel."

2.~~10~~11. Ethanol Flex Fuel. – Ethanol flex fuel is covered by one of two ASTM standards based on the ethanol concentration of blend:

(a) Ethanol flex fuel containing 51 to 83 volume percent ethanol shall meet the latest version of ASTM D5798, "Standard Specifications for Ethanol Fuel Blends for Flexible Fuel Automotive Spark-Ignition Engines**;**"~~;~~ and

(b) Ethanol flex fuel containing 16 to 50 volume percent ethanol shall be blended, stored, ~~and conveyed~~ **delivered and offered** for consumption in accordance with the latest version of ASTM D7794, "Standard Practice for Blending Mid-Level Ethanol Fuel Blends for Flexible Fuel Vehicles with Automotive Spark-Ignition Engines."
(Amended 20XX)

(Added 1997) (Amended 2014 **and 20XX**)

2.~~11~~12. M85 Fuel Methanol. – Shall meet the latest version of ASTM D5797, "Standard Specification for Fuel Methanol M70-M85 for Automotive Spark Ignition Engines."

(Added 1997)

2.13. Racing Gasoline. – Shall meet the following requirements:

(a) The Minimum Antiknock Index (AKI) shall not be less than the AKI posted on the product dispenser or as certified on the invoice, bill of lading, shipping paper, or other documentation.

(b) The product specifications limits shall be those as declared by the manufacturer's product specifications. Upon the request of the Director, each supplier of racing gasoline shall provide a copy of the manufacturer's product specifications.

(Added 20XX)

2.~~12~~14. Engine (Motor) Oil. – Shall not be sold or distributed for use unless the product conforms to the following specifications:

(a) performance claims listed on the label shall be evaluated against the latest version of SAE J183, "Engine Oil Performance and Engine Service Classification," API 1509 "Engine Oil Licensing and Certification System," European Automobile Manufacturers' Association (ACEA), "European Oil Sequences," or other "Vehicle or Engine Manufacturer Standards" as applicable; and

(b) the product shall meet its labeled viscosity grade specification as specified in the latest version of SAE J300, "Engine Oil Viscosity Classification.**"**

(Added 2004) (Amended 2014)

2.~~13~~15. Products for Use in Lubricating Manual Transmissions, Gears, or Axles. – Shall not be sold or distributed for use in lubricating manual transmissions, gears, or axles unless the product conforms to the following specifications:

(a) it is labeled with one or more of the service designations found in the latest version of the SAE Information Report on axle and manual transmission lubricants, SAE J308, and API Publication 1560, and meets all applicable requirements of those designations;

(b) the product shall meet its labeled viscosity grade classification as specified in the latest version of SAE J306; and

(c) the product shall be free from water and suspended matter when tested by means of centrifuge, in accordance with the latest version of ASTM D2273, "Standard Test Method for Trace Sediment in Lubricating Oils."

(Added 2004)

2.~~14~~16. Products for Use in Lubricating Automatic Transmissions. – Any automatic transmission fluid sold without limitation as to type of transmission for which it is intended shall meet all automotive manufacturers' recommended requirements for transmissions in general use in the state. Automatic transmission fluids that are intended for use only in certain transmissions, as disclosed on the label of its container, shall meet the latest automotive manufacturers' recommended requirements for those transmissions. Adherence to automotive manufacturers' recommended requirements shall be based on tests currently available to the lubricants' industry and the state regulatory agency. Any material offered for sale or sold as an additive to automatic transmission fluids shall be compatible with the automatic transmission fluid to which it is added, and shall meet all performance claims as stated on the label. Any manufacturer of any such product sold in this state shall provide, upon request by a duly authorized representative of the Director, documentation of any claims made on their product label.

(Added 2004)

2.~~15~~17. Biodiesel Blendstock. – **~~B100 bB~~**iodiesel intended for blending with diesel fuel shall meet the latest version of ASTM D6751, "Standard Specification for Biodiesel Fuel ~~(B100)~~ Blend Stock **(B100)** for **Middle** Distillate Fuels." **All biodiesel blend stock shall be at least 99% biodiesel (no more than 1% diesel fuel). Any**

blend stock less than 99% biodiesel shall not be used as a commercial blend stock for biodiesel blends without the permission of the Director.

(Added 2004) **(Amended 20XX)**

~~**2.16. Biodiesel Blends. – Blends of biodiesel and diesel fuels shall meet the following requirements:**~~

~~**(a) blends that contain less than or equal to 5 % must meet the latest version of ASTM D975, "Standard Specification for Diesel Fuel Oils";**~~

~~**(b) blends greater than 5 % biodiesel and that contain less than or equal to 20 % by volume shall meet the latest version of ASTM D7467, "Standard Specification for Diesel Fuel Oil, Biodiesel Blend (B6 to B20)";**~~

~~**(c) use of S15 biodiesel is required when blending into S15 low sulfur motor vehicle diesel fuel when the intention is to certify the fuel as S15 grade; and**~~

~~**(d) when blends greater than 20 % are offered for sale, the diesel fuel used in the blend shall meet the latest version of ASTM D975, "Standard Specification for Diesel Fuel Oils," and the biodiesel blend stock shall meet the specifications of Section 2.15. Biodiesel.**~~

~~**(Added 2004) (Amended 2008)**~~

2.18. Butanol for Blending with Gasoline. – Shall meet the latest version of ASTM D7862, "Standard Specifications for Butanol for Blending with Gasoline for Use as Automotive Spark-Ignition Engine Fuel."
(Added 20XX)

2.19. Dimethyl Ether for Fuel Purposes. – Shall meet the latest version of ASTM D7901, "Standard Specification for Dimethyl Ether for Fuel Purposes."
(Added 20XX)

2.~~17~~20. Hydrogen Fuel. – Shall meet the latest version of SAE J2719, "Hydrogen Fuel Quality for Fuel Cell Vehicles."

(Added 2012)

2.~~18~~21. Diesel Exhaust Fluid (DEF). – Shall meet the latest version of the ISO 22241, "Diesel engines – NOx reduction agent AUS 32."

(Added 2014)

Section 3. Classification and Method of Sale ~~of Petroleum Products~~

3.1. General Considerations.

3.1.1. Documentation. – When products regulated by this rule are sold, an invoice, bill of lading, shipping paper, or other documentation must accompany each delivery other than a retail sale. This document must identify the quantity, the name of the product, the particular grade of the product, the applicable automotive fuel rating, and oxygenate type and content (if applicable), the name and address of the seller and buyer, and the date and time of the sale. Documentation must be retained at the retail establishment for a period not less than one year.

(Amended 2008)

3.1.2. Retail Dispenser Labeling. – All retail dispensing devices must identify conspicuously the type of product **(exception: gasoline and gasoline-oxygenate blends)**, the particular grade of the product **(exception: No. 2 Diesel)**~~,~~ and the applicable automotive fuel rating.

3.1.3. Grade Name. – The sale of any product under any grade name that indicates to the purchaser that it is of a certain automotive fuel rating or ASTM grade shall not be permitted unless the automotive fuel rating or grade indicated in the grade name is consistent with the value and meets the requirements of Section 2, Standard ~~Fuel~~ Specifications.

3.1.4. Nozzle Requirements for Automotive Gasoline, Gasoline-Oxygenate Blends, and Diesel Fuel Dispensers. – Each retail dispensing device from which fuel products are sold shall be equipped with a nozzle spout having a diameter that conforms with the latest version of SAE J285, "Dispenser Nozzle Spouts for Liquid Fuel Intended for Use with Spark-Ignition and Compression Ignition Engines." (Added 20XX)

3.2. Automotive Gasoline and Automotive Gasoline-Oxygenate Blends (Including Racing Gasoline).

3.2.1. Posting of Antiknock Index Required. – ~~**All a**~~**A**utomotive gasoline and automotive gasoline-oxygenate blends shall post the **minimum** antiknock index in accordance with applicable regulations, 16 CFR Part 306 issued pursuant to the Petroleum Marketing Practices Act, as amended.

~~**3.2.2. When the Term "Leaded" May be Used. – The term "leaded" shall be used only when the fuel meets specification requirements of paragraph 2.1.5. Minimum Lead Content to be Termed "Leaded."**~~

3.2.3~~2~~. Use of Lead Substitute Must be Disclosed. – Each dispensing device from which gasoline or gasoline-oxygenate blends containing a lead substitute is dispensed shall display the following legend: "Contains Lead Substitute." The lettering of this legend shall not be less than 12.7 mm (½ in) in height and the color of the lettering shall be in definite contrast to the background color to which it is applied.

~~**3.2.4. Nozzle Requirements for Leaded Fuel. – Each dispensing device from which gasoline or gasoline-oxygenate blends that contain lead in amounts sufficient to be considered "leaded" gasoline, or lead substitute engine fuel, is sold shall be equipped with a nozzle spout having a terminal end with an outside diameter of not less than 23.63 mm (0.930 in).**~~

3.2.~~5~~3. Prohibition of Terms. – It is prohibited to use specific terms to describe a grade of gasoline or gasoline-oxygenate blend unless it meets the minimum antiknock index requirement shown in Table 1. Minimum Antiknock Index Requirements.

Table 1.
Minimum Antiknock Index Requirements

Term	Minimum Antiknock Index	
	ASTM D4814 Altitude Reduction Areas IV and V	**All Other ASTM D4814 Areas**
Premium, Super, Supreme, High Test	90	91
Midgrade, Plus	87	89
~~**Regular Leaded**~~	~~**86**~~	~~**88**~~
Regular, Unleaded (alone)	85	87
Economy	--	86

(Table 1. Amended 1997)

(Amended 20XX)

3.2.~~6~~4. Method of Retail Sale. – Type of Oxygenate must be disclosed. All automotive gasoline or automotive gasoline-oxygenate blends**, or racing gasoline** kept, offered, or exposed for sale, or sold at retail containing **~~at least 1.5 mass percent oxygen~~ more than 1 volume percent oxygenate** shall be identified as "with" or "containing" (or similar wording) the predominant oxygenate in the engine fuel. For example, the label may read "contains ethanol" or "with methyl *tertiary*-butyl ether (MTBE)." The oxygenate contributing the largest mass percent oxygen to the blend shall be considered the predominant oxygenate. Where mixtures of only ethers are present, the retailer may post the predominant oxygenate followed by the phrase "or other ethers" or alternatively post the phrase "contains MTBE or other ethers." In addition, gasoline-methanol blend**s** ~~fuels~~ containing more than **~~0.15 mass percent oxygen from~~ 0.3% by volume** methanol shall be identified as "with" or "containing" methanol. This information shall be posted on the upper 50 % of the dispenser front panel in a position clear and conspicuous from the driver's position in a type at least 12.7 mm (½ in) in height, 1.5 mm (1/16 in) stroke (width of type).

(Amended 1996 **and 20XX**)

3.2.~~7~~5. Documentation for Dispenser Labeling Purposes. – **For automotive gasoline, automotive gasoline-oxygenate blends, or racing gasoline, t~~T~~**he retailer shall be provided, at the time of delivery of the fuel, on product transfer documents such as an invoice, bill of lading, shipping paper, or other documentation:

(a) I
nformation that **~~compiles~~ complies** with 40 CFR § 80.1503 when the fuel contains ethanol.
(Added 2014)

For fuels that do not contain ethanol, information that complies with 40 CFR § 80.1503 and a declaration of the predominant oxygenate or combination of oxygenates present in concentrations sufficient to yield an oxygen content of at least 1.5 mass percent in the fuel. Where mixtures of only ethers are present, the fuel supplier may identify either the predominant oxygenate in the fuel (i.e., the oxygenate contributing the largest mass percent oxygen) or alternatively, use the phrase "contains MTBE or other ethers."
(Added 2014)

Gasoline containing more than **~~0.15 mass~~ 0.3** percent **~~oxygen from~~ by volume** methanol shall be identified as "with" or "containing" methanol.
(Added 2014) **(Amended 20XX)**

(Amended 1996**,** ~~and~~ 2014**, and 20XX**)

3.2.~~8~~6. EPA Labeling Requirements also Apply. – Retailers and wholesale purchaser-consumers of gasoline shall comply with the EPA pump labeling requirements for gasoline containing greater than 10 volume percent (v%) up to 15 volume percent (v%) ethanol (E15) under 40 CFR § 80.1501.
(Added 2012)

3.3. Diesel Fuel.

3.3.1. Labeling of Grade Required. – Diesel Fuel **other than No.2-D** shall be identified by **grade~~s No. 1-D, No. 2-D, or No. 4-D~~**.

~~3.3.2. EPA Labeling Requirements Also Apply. Retailers and wholesale purchaser-consumers of diesel fuel shall comply with EPA pump labeling requirements for sulfur under 40 CFR § 80.570.~~

3.3.2. Automotive Fuel Rating. – Diesel fuel containing 6 to 20 percent biodiesel shall be labeled with its automotive fuel rating in accordance with the Federal Trade Commission Automotive Fuel Ratings, Certification and Posting Rule, 16 CFR Part 306.

3.3.3. Delivery Documentation for Premium Diesel. – Before or at the time of delivery of premium diesel fuel, the retailer or the wholesale purchaser-consumer shall be provided on an invoice, bill of lading, shipping paper, or other documentation a declaration of all performance properties that qualifies the fuel as premium diesel fuel as required in Section 2.2.1. Premium Diesel Fuel.

(Added 1998) (Amended 1999)

~~3.3.4. Nozzle Requirements for Diesel Fuel. – Each dispensing device from which diesel fuel is sold at retail shall be equipped with a nozzle spout with a diameter that conforms to the latest version of SAE J285, "Dispenser Nozzle Spouts for Liquid Fuels Intended for Use with Spark Ignition and Compression Ignition Engines." (Enforceable effective July 1, 2013)~~

~~(Added 2012)~~

(Amended 1998, 1999, 2008, ~~and~~ 2012**, and 20XX**)

3.4. Aviation Turbine Fuels.

3.4.1. Labeling of Grade Required. – Aviation turbine fuels shall be identified by ~~**Jet A, Jet A 1, or Jet B**~~ **the grade terms contained in applicable ASTM Standard Specifications. See EI 1542 for additional detail**. **(Amended 20XX)**

3.4.2. NFPA Labeling Requirements also Apply. – Each dispenser or airport fuel truck dispensing aviation turbine fuels shall be labeled in accordance with the most recent edition of National Fire Protection Association (NFPA 407), Standard for Aircraft Fuel Servicing.

NOTE: *For example, NFPA 407, 20~~07~~17 edition: Section ~~4.3.18 Product Identification Signs.~~6.1.11.3 Signage. Each aircraft fuel servicing vehicle or cart shall have a signage viewable from all ~~on each~~ sides of the vehicle ~~and the rear to indicate the product~~. ~~The s~~Signs shall have letters at least 75 mm (3 in) high. Signs shall be of a color ~~sharply~~ contrasting sharply with ~~it's~~ the background for visibility. ~~It shall show t~~The words "FLAMMABLE," "NO SMOKING," and the name of the product carried, such as ~~"~~"JET A,"~~"~~ ~~"~~"JET B,"~~"~~ ~~"~~"GASOLINE,"~~"~~ or ~~"~~"AVGAS.~~"~~, shall appear on each sign. (**NOTE:** Refer to the most recent edition NFPA 407.)*

3.5. Aviation Gasoline.

3.5.1. Labeling of Grade Required. – Aviation gasoline shall be identified by ~~**Grade 80, Grade 91, Grade 100, or Grade 100LL, or Grade 82UL**~~ **the grade terms contained in applicable ASTM Standard Specifications. See EI 1542 for additional detail.**

(Amended 2008 **and 20XX**)

3.5.2. NFPA Labeling Requirements also Apply. – Each dispenser or airport fuel truck dispensing aviation gasoline shall be labeled in accordance with the most recent edition of National Fire Protection Association (NFPA) 407, Standard for Aircraft Fuel Servicing.

NOTE: *For example, NFPA 407, 20~~07~~17 edition: Section ~~4.3.18 Product Identification Signs.~~6.1.11.3 Signage. Each aircraft fuel servicing vehicle or cart shall have a signage viewable from all ~~on each~~ sides of the vehicle ~~and the rear to indicate the product~~. ~~The s~~Signs shall have letters at least 75 mm (3 in) high. Signs shall be of a color ~~sharply~~ contrasting sharply with ~~it's~~ the background for visibility. ~~It shall show t~~The words "FLAMMABLE," "NO SMOKING," and the name of the product carried, such as ~~"~~"JET A,"~~"~~ ~~"~~"JET B,"~~"~~ ~~"~~"GASOLINE,"~~"~~ or ~~"~~"AVGAS.~~"~~, shall appear on each sign. (**NOTE:** Refer to the most recent edition NFPA 407.)*

3.6. Fuel Oils.

3.6.1. Labeling of Grade Required. – Fuel Oil shall be identified by the grades ~~**of No. 1 S500, No. 1 S5000, No. 2 S500, No. 2 S5000, No. 4 (Light), No. 4, No. 5 (Light), No. 5 (Heavy), or No. 6.**~~ **contained in ASTM D396.**

3.6.2. Retail Fuel Oil. – Dispensers shall display the following legend:

"Warning – Not Suitable For Use In Unvented Heaters Requiring No. 1-K Kerosene."

The lettering of this legend shall not be less than 12.7 millimeters (1/2 in) in height by 1.5 millimeters (1/16 in) strokes (width of type); block style letters and the color of lettering shall be in definite contrast to the background color to which it is applied.
(Added 20XX)

(Amended 2008 **and 20XX**)

3.7. Kerosene (Kerosine).

3.7.1. Labeling of Grade Required. – Kerosene shall be identified by the grades No. 1-K or No. 2-K.

3.7.2. Additional Labeling Requirements. – Each retail dispenser of kerosene shall be labeled as 1-K Kerosene or 2-K. In addition, No. 2-K dispensers shall display the following legend:

"Warning - Not Suitable For Use In Unvented Heaters Requiring No. 1-K."

The lettering of this legend shall not be less than 12.7 mm (½ in) in height by 1.5 mm (1/16 in) stroke; block style letters and the color of lettering shall be in definite contrast to the background color to which it is applied.

3.8. Ethanol Flex Fuel.

3.8.1. How to Identify Ethanol Flex Fuel. – Ethanol flex fuel shall be identified as Ethanol Flex Fuel or EXX Flex Fuel.

3.8.2. Labeling Requirements.

(a) E
thanol flex fuel with an ethanol concentration no less than 51 and no greater than 83 volume percent shall be labeled "Ethanol Flex Fuel, minimum 51 % ethanol."

(b) Ethanol flex fuel with an ethanol concentration less than or equal to 50 volume percent shall be labeled "EXX Flex Fuel, minimum YY % ethanol," where the XX is the ethanol concentration in volume percent and YY is XX minus five (− 5). The actual ethanol concentration of the fuel shall be XX volume percent plus or minus five (± 5) volume percent.
(Added 2014)

(c) A label shall be posted which states "For Use in Flexible Fuel Vehicles (FFV) Only." This information shall be clearly and conspicuously posted on the upper 50 % of the dispenser front panel in a type at least 12.7 mm (½ in) in height, 1.5 mm (1/16 in) stroke (width of type). A label shall be posted which states, "CHECK OWNER'S MANUAL," and shall not be less than 6 mm (¼ in) in height by 0.8 mm (1/32 in) stroke; block style letters and the color shall be in definite contrast to the background color to which it is applied.

(Amended 2007, 2008, and 2014)

3.9. M85 Fuel Methanol.

3.9.1. How to Identify M85 Fuel Methanol. – Fuel methanol shall be identified as M85.

Example:
M85

3.9.2. Retail Dispenser Labeling.

(a) Fuel methanol shall be labeled with its automotive fuel rating in accordance with 16 CFR Part 306.

Example:
M85 Methanol

(b) A label shall be posted which states "For Use in Vehicles Capable of Using M85 Only." This information shall be clearly and conspicuously posted on the upper 50 % of the dispenser front panel in a type of at least 12.7 mm (½ in) in height, 1.5 mm (1/16 in) stroke (width of type).

(Amended 2008)

3.10. Liquefied Petroleum Gas (LPG).

3.10.1. How LPG is to be Identified. – Liquefied petroleum gases shall be identified by grades Commercial Propane, Commercial Butane, Commercial PB Mixtures or Special-Duty Propane (HD5).

3.10.2. Retail Dispenser Labeling. – Each retail dispenser of LPGs shall be labeled as "Commercial Propane," "Commercial Butane," "Commercial PB Mixtures," or "Special-Duty Propane (HD5)."

3.10.3. Additional Labeling Requirements. – LPG shall be labeled with its automotive fuel rating in accordance with 16 CFR Part 306.

3.10.4. NFPA Labeling Requirements Also Apply. (Refer to the most recent edition of NFPA 58.)

3.11. Compressed Natural Gas (CNG).

3.11.1. How Compressed Natural Gas is to be Identified. – For the purposes of this regulation, compressed natural gas shall be identified by the term "Compressed Natural Gas" or "CNG."

3.11.2. Retail Sales of Compressed Natural Gas Sold as a Vehicle Fuel.

3.11.2.1. Retail Dispenser Labeling.

3.11.2.1.1. Identification of Product. – Each retail dispenser of CNG shall be labeled as "Compressed Natural Gas."

3.11.2.1.2. Non-Liquid Alternative Vehicle Fuel Rating. – CNG shall be labeled with its non-liquid alternative vehicle fuel rating in accordance with 16 CFR Part 309.
(Added 20XX)

~~**3.11.2.1.2. Pressure. – CNG is dispensed into vehicle fuel containers with working pressures of 20 684 kPa (3000 psi), or 24 821 kPa (3600 psi). The dispenser shall be labeled 20 684 kPa (3000 psi), or 24 821 kPa (3600 psi) corresponding to the pressure of the CNG dispensed by each fueling hose.**~~
~~**(Amended 2016)**~~

3.11.2.1.3. NFPA Labeling. – NFPA Labeling requirements also apply. (Refer to NFPA 52.)

(Amended 20XX)

3.11.3~~2~~2.2. Nozzle Requirements for CNG. – CNG fueling nozzles shall comply with ANSI/AGA/CGA NGV 1.

3.12. Liquefied Natural Gas (LNG).

3.12.1. How Liquefied Natural Gas is to be Identified. – For the purposes of this regulation, liquefied natural gas shall be identified by the term "Liquefied Natural Gas" or "LNG."

3.12.2. Labeling of Retail Dispensers of Liquefied Natural Gas Sold as a Vehicle Fuel.

3.12.2.1. Identification of Product. – Each retail dispenser of LNG shall be labeled as "Liquefied Natural Gas."

3.12.2.2. Automotive Fuel Rating. – LNG automotive fuel shall be labeled with its automotive fuel rating in accordance with 16 CFR Part 306.

3.12.2.3. NFPA Labeling. – NFPA Labeling requirements also apply. (Refer to NFPA 57.)

3.13. Oil.

3.13.1. Labeling of Vehicle Engine (Motor) Oil Required.

3.13.1.1. Viscosity. – The label on any vehicle engine (motor) oil container, receptacle, dispenser, or storage tank and the invoice or receipt from service on an engine that includes the installation of bulk vehicle engine (motor) oil dispensed from a receptacle, dispenser, or storage tank shall contain the viscosity grade classification preceded by the letters "SAE" in accordance with the SAE International's latest version of SAE J300, "Engine Oil Viscosity Classification."

(Amended 2012 and 2014)

3.13.1.2. Brand. – The label on any vehicle engine (motor) oil container and the invoice or receipt from service on an engine that includes the installation of bulk vehicle engine (motor) oil dispensed from a receptacle, dispenser, or storage tank shall contain the name, brand, trademark, or trade name of the vehicle engine (motor) oil.

(Added 2012 and 2014)

3.13.1.3. Engine Service Category. – The label on any vehicle engine (motor) oil container, receptacle, dispenser or storage tank and the invoice or receipt from service on an engine that includes the installation of bulk vehicle engine (motor) oil dispensed from a receptacle, dispenser, or storage tank shall contain the engine service category, or categories, displayed in letters not less than 3.18 mm (1/8 in) in height, as defined by the latest version of SAE J183, "Engine Oil Performance and Engine Service Classification (Other than "Energy Conserving")" API Publication 1509, "Engine Oil Licensing and Certification System," European Automobile Manufacturers Association (ACEA), "European Oil Sequences," or other "Vehicle or Engine Manufacturer Standards" as provided in Section 3.13.1.3.1.

(Amended 2012 and 2014)

3.13.1.3.1. Vehicle or Engine Manufacturer Standard. – The label on any vehicle engine (motor) oil container, receptacle, dispenser, or storage tank and the invoice or receipt from service on an engine that includes the installation of vehicle engine (motor) oil dispensed from a receptacle, dispenser, or storage tank shall identify the specific vehicle or engine manufacturer standard, or standards, met in letters not less than 3.18 mm (1/8 in) in height. If the vehicle (motor) oil only meets a vehicle or engine manufacturer standard, the label must clearly identify that the oil is only intended for use where specifically recommended by the vehicle or engine manufacturer.

(Added 2014)

3.13.1.3.2. Inactive or Obsolete Service Categories. – The label on any vehicle engine (motor) oil container, receptacle, dispenser, or storage tank and the invoice or receipt from service on an engine that includes the installation of vehicle engine (motor) oil dispensed from a receptacle, dispenser, or storage tank shall bear a plainly visible cautionary statement in compliance with the latest version of SAE J183, "Engine Oil Performance and Engine Service Classification (Other than "Energy Conserving")" Appendix A, whenever the vehicle engine (motor) oil in the container or in bulk does not meet an active API service category as defined by the latest version of SAE J183, "Engine Oil Performance and Engine Service Classification (Other than "Energy Conserving")." If a vehicle engine (motor) oil is identified as only meeting a vehicle or engine manufacturer standard, the labeling requirements in Section 3.13.1.3.1. Vehicle or Engine Manufacturer Standard applies.

(Added 2012) (Amended 2014)

3.13.1.4. Tank Trucks or Rail Cars. – Tank trucks, rail cars, and types of delivery trucks that are used to deliver bulk vehicle engine (motor) oil are not required to display the SAE viscosity grade and service category or categories on such tank trucks, rail cars, and other types of delivery trucks.

(Added 2012) (Amend 2013 and 2014)

3.13.1.5. Documentation. – When the engine (motor) oil is sold in bulk, an invoice, bill of lading, shipping paper, or other documentation must accompany each delivery. This document must identify the quantity of bulk engine (motor) oil delivered as defined in Sections 3.13.1.1. Viscosity; 3.13.1.2. Brand; 3.13.1.3. Engine Service Category; the name and address of the seller and buyer; and the date and time of the sale. For inactive or obsolete service categories, the documentation shall also bear a plainly visible cautionary statement as required in Section 3.13.1.3.2. Inactive or Obsolete Service Categories. Documentation must be retained at the retail establishment for a period of not less than one year.

(Added 2013) (Amended 2014)

(Amended 2012, 2013, and 2014)

3.13.2. Labeling of Recreational Motor Oil.

3.13.2.1. Viscosity. – The label on each container of recreational motor oil shall contain the viscosity grade classification preceded by the letters "SAE" in accordance with the SAE International's latest version of SAE J300, "Engine Oil Viscosity Classification."

3.13.2.2. Intended Use. – The label on each container of recreational motor oil shall contain a statement of its intended use in accordance with the latest version of SAE J300, "Engine Oil Viscosity Classification."

3.13.3. Labeling of Gear Oil.

3.13.3.1. Viscosity. – The label on each container of gear oil shall contain the viscosity grade classification preceded by the letters "SAE" in accordance with the SAE International's latest version of SAE J306, "Automotive Gear Lubricant Viscosity Classification" or SAE J300, "Engine Oil Viscosity Classification."

3.13.3.1.1. Exception. – Some automotive equipment manufacturers may not specify an SAE viscosity grade requirement for some applications. Gear oils intended to be used only in such applications are not required to contain an SAE viscosity grade on their labels.

3.13.3.2. Service Category. – The label on each container of gear oil shall contain the service category, or categories, in letters not less than 3.18 mm (1/8 in) in height, as defined by the latest version of SAE J308, "Axle and Manual Transmission Lubricants."

(Added 2004)

3.14. Automatic Transmission Fluid.

3.14.1. Labeling. – The label on a container of automatic transmission fluid shall not contain any information that is false or misleading. In addition, each container of automatic transmission fluid shall be labeled with the following:

(a) the brand name;

(b) the name and place of business of the manufacturer, packer, seller, or distributor;

(c) the words "Automatic Transmission Fluid";

(d) the duty type of classification; and

(e) an accurate statement of the quantity of the contents in terms of liquid measure.

3.14.2. Documentation of Claims Made Upon Product Label. – Any manufacturer or packer of any product subject to this article and sold in this state shall provide, upon request of duly authorized representatives of the Director, documentation of any claim made upon their product label.

(Added 2004)

3.15. Biodiesel and Biodiesel Blends.

3.15.1. Identification of Product. – Biodiesel **Blendstock** shall be identified by the term "biodiesel" with the designation "B100**" or "B99**." ~~**Biodiesel blends shall be identified by the term "Biodiesel Blend."**~~ **(Amended 20XX)**

3.15.2. Labeling of Retail Dispensers.

3.15.2.1. Labeling of Grade Required. – Biodiesel shall be identified by the grades **No. 1-B** S15**, No.1-B S500, or No.2-B** ~~**or**~~ S500. ~~**Biodiesel blends shall be identified by the grades No. 1-D, No. 2-D, or No. 4-D.**~~

~~**3.15.2.2. EPA Labeling Requirements also Apply. Retailers and wholesale purchaser-consumers of biodiesel blends shall comply with EPA pump labeling requirements for sulfur under 40 CFR § 80.570.**~~

3.15.2.3~~2~~. Automotive Fuel Rating. – Biodiesel and biodiesel blends shall be labeled with its automotive fuel rating in accordance with **the Federal Trade Commission Automotive Fuel Ratings, Certification and Posting Rule,** 16 CFR Part 306.

3.15.2.4~~3~~. Biodiesel Blends. – When biodiesel blends greater than 20 % by volume are offered by sale, each side of the dispenser where fuel can be delivered shall have a label conspicuously placed that states "Consult Vehicle Manufacturer Fuel Recommendations."

The lettering of this legend shall not be less than 6 mm (¼ in) in height by 0.8 mm (1/32 in) stroke; block style letters and the color shall be in definite contrast to the background color to which it is applied.

3.15.3. Documentation for Dispenser Labeling Purposes. – The retailer shall be provided, at the time of delivery of the fuel, a declaration of the volume percent biodiesel on an invoice, bill of lading, shipping paper, or other document. This documentation is for dispenser labeling purposes only; it is the responsibility of any potential blender to determine the amount of biodiesel in the diesel fuel prior to blending.

3.15.4. Exemption. – Biodiesel blends that contain less than or equal to 5 % biodiesel by volume are exempted from the requirements of Sections 3.15.1. Identification of Product, 3.15.2. Labeling of Retail Dispensers, and

3.15.3. Documentation for Dispenser Labeling Purposes when it is sold as "diesel fuel" as required in Section 3.3. Diesel Fuel.

(Added 2005) (Amended 2008 **and 20XX**)

3.16. Diesel Exhaust Fluid (DEF).

3.16.1. Labeling of Diesel Exhaust Fluid (DEF). – DEF shall be labeled .

3.16.1.1. Retail Dispenser Labeling. – A label shall be clearly and conspicuously placed on the front panel of the DEF dispenser stating "for operation of selective catalytic reduction (SCR) converters in motor vehicles with diesel engines."

3.16.1.2. Documentation for Retailers of Bulk Product. – A DEF supplier shall provide, at the time of delivery of the bulk shipment of DEF, identification of the fluid's origin including the name of the fluid manufacturer, the brand name, trade name, or trademark, and a statement identifying the fluid as DEF conforming to specifications given in the latest version of ISO 22241, "Diesel engines – NOx reduction agent AUS 32." This information shall be provided by the supplier on an invoice, bill of lading, shipping paper, or other document.

3.16.1.3. Labeling Packaged Product. – Any DEF retail package shall bear a label that includes the name of the fluid manufacturer, the brand name, trade name, or trademark, a statement identifying the fluid as DEF conforming to specifications given in the latest version of ISO 22241, "Diesel engines – NOx reduction agent AUX 32." And the statement, "It is recommended to store DEF between − 5 °C to 30 °C (23 °F to 86 °F)."

3.16.1.4. Documentation for Bulk Deliveries. – A carrier that transports or accepts for transportation any bulk shipment by tank truck, freight container, cargo tank, railcar, or any other vehicle used to transport or deliver bulk quantities of DEF shall, at the time of delivery of the DEF, provide identification of the fluid's origin including the name of the fluid manufacturer, the brand name, trade name, or trademark, and a statement identifying the fluid as DEF conforming to specifications given in the latest version of ISO 22241, "Diesel engines – NOx reduction agent AUS 32." This information shall be provided to the recipient on an invoice, bill of lading, shipping paper, or other document.

Effective date shall be January 1, 2016.

(Added 2014)

Section 4. Retail Storage Tanks and Dispenser Filters

4.1. Water in Gasoline-Alcohol Blends, Biodiesel Blends, Ethanol Flex Fuel, Aviation Gasoline, and Aviation Turbine Fuel. – No water phase greater than 6 mm (¼ in) as determined by an appropriate detection paste or other acceptable means, is allowed to accumulate in any tank utilized in the storage of gasoline-alcohol blend, biodiesel, biodiesel blends, ethanol flex fuel, aviation gasoline, and aviation turbine fuel.

(Amended 2008, 2012, and 2014)

4.2. Water in Gasoline, Diesel, Gasoline-Ether, and Other Fuels. – Water shall not exceed 25 mm (1 in) in depth when measured with water indicating paste or other acceptable means in any tank utilized in the storage of diesel, gasoline, gasoline-ether blends, and kerosene sold at retail except as required in Section 4.1. Water in Gasoline-Alcohol Blends, Biodiesel Blends, Ethanol Flex Fuel, Aviation Gasoline, and Aviation Turbine Fuel.

(Amended 2008, 2012, and 2014)

4.3. Dispenser Filters.

4.3.1. Engine Fuel Dispensers.

(a) All gasoline, gasoline-alcohol blends, gasoline-ether blends, ethanol flex fuel, and M85 methanol dispensers shall have a 10 micron or smaller nominal pore-sized filter.

(b) All biodiesel, biodiesel blends, diesel, and kerosene dispensers shall have a 30 micron or smaller nominal pore-sized filter.

(Amended 2014)

4.3.2. Delivery of Aviation Fuel and Gasoline.

(a) Fuel delivery of aviation turbine fuel into aircraft shall be filtered through a fuel filter/separator conforming to ~~**API**~~ **EI** 1581, "Specification and Qualification Procedures for Aviation Jet Fuel Filter/Separators."

(b) Fuel delivery of aviation gasoline into aircraft shall be filtered through a fuel filter/separator conforming to ~~**API**~~ **EI** 1581, "Specification and Qualification Procedures for Aviation Jet Fuel Filter/Separators."

(Added 2008) (Amended 2014)

4.4. Product Storage Identification.

4.4.1. Fill Connection Labeling. – The fill connection for any fuel product storage tank or vessel supplying engine-fuel devices shall be permanently, plainly, and visibly marked as to the product contained.

(Amended 2008)

4.4.2. Declaration of Meaning of Color Code. – When the fill connection device is marked by means of a color code, the color code shall be conspicuously displayed at the place of business~~.~~ **and the American Petroleum Institute color codes as specified and published in "API Recommended Practice 1637" shall be used.**
(Amended 20XX)

4.5. Volume of Product Information. – Each retail location shall maintain on file a calibration chart or other means of determining the volume of each regulated product in each storage tank and the total capacity of such storage tank(s). This information shall be supplied immediately to the Director.

Section 5. Condemned Product

5.1. Stop-Sale Order at Retail. – A stop-sale order may be issued to retail establishment dealers for fuels failing to meet specifications or when a condition exists that causes product degradation. A release from a stop-sale order will be awarded only after final disposition has been agreed upon by the Director. Confirmation of disposition shall be submitted in writing on form(s) provided by the Director and contain an explanation for the fuel's failure to meet specifications. Upon discovery of fuels failing to meet specifications, meter readings and physical inventory shall be taken and reported in confirmation for disposition. Specific variations or exemptions may be made for fuels designed for special equipment or services and for which it can be demonstrated that the distribution will be restricted to those uses.

5.2. Stop-Sale Order at Terminal or Bulk Plant Facility. – A stop-sale order may be issued when products maintained at terminals or bulk plant facilities fail to meet specifications or when a condition exists that may cause product degradation. The terminal or bulk storage plant shall immediately notify all customers that received those product(s) and make any arrangements necessary to replace or adjust to specifications those product(s). A release from a stop-sale order will be awarded only after final disposition has been agreed upon by the Director. Confirmation of disposition of products shall be made available in writing to the Director. Specific variations or exemptions may be made for fuels used for blending purposes or designed for special equipment or services and for which it can be demonstrated that the distribution will be restricted to those uses.

Section 6. Product Registration

6.1. Engine Fuels Designed for Special Use. – All engine fuels designed for special use that do not meet ASTM specifications or standards addressed in Section 2. Standard Fuel Specifications shall be registered with the Director on forms prescribed by the Director 30 days prior to when the registrant wishes to engage in sales. The registration form shall include all of the following information:

6.1.1. Identity. – Business name and address(es).

6.1.2. Address. – Mailing address, if different than business address.

6.1.3. Business Type. – Type of ownership of the distributor or retail dealer, such as an individual, partnership, association, trust, corporation, or any other legal entity or combination thereof.

6.1.4. Signature. – An authorized signature, title, and date for each registration.

6.1.5. Product Description. – Product brand name and product description.

6.1.6. Product Specification. – A product specification sheet shall be attached.

6.2. Renewal. – Registration is subject to annual renewal.

6.3. Re-registration. – Re-registration is required 30 days prior to any changes in Section 6.1. Engine Fuels Designed for Special Use.

6.4. Authority to Deny Registration. – The Director may decline to register any product that actually or by implication would deceive or tend to deceive a purchaser as to the identity or the quality of the engine fuel.

6.5. Transferability. – The registration is not transferable.

Section 7. Test Methods and Reproducibility Limits

7.1. ASTM Standard Test Methods. – ASTM Standard Test Methods referenced for use within the applicable Standard Specification shall be used to determine the specification values for enforcement purposes.

7.1.1. Premium Diesel. – The following test methods shall be used to determine compliance with the premium diesel parameters:

(a) **Cetane Number.** – ASTM D613, "Standard Test Method for Cetane Number of Diesel Fuel Oil";

(b) **Low Temperature Operability.** – ASTM D4539, "Standard Test Method for Filterability of Diesel Fuels by Low-Temperature Flow Test (LTFT) or ASTM D2500, "Standard Test Method for Cloud Point of Petroleum Products" (according to marketing claim);

(c) **Thermal Stability.** – ASTM D6468, "Standard Test Method for High Temperature Stability of Middle Distillate Fuels" (180 min, 150 °C); and

(d) **Lubricity.** – ASTM D6079, "Standard Test Method for Evaluating Lubricity of Diesel Fuels by the High Frequency Reciprocating Rig (HFRR)."

(Amended 2003)

7.2. Reproducibility Limits.

7.2.1. AKI Limits. – When determining the antiknock index (AKI) acceptance or rejection of a gasoline sample, the AKI reproducibility limits as outlined in the latest version of ASTM D4814, "Standard

Specification for Automotive Spark-Ignition Engine Fuel, Appendix X1 shall be acknowledged for enforcement purposes.

7.2.2. Reproducibility. – The reproducibility limits of the standard test method used for each test performed shall be acknowledged for enforcement purposes, except as indicated in Section 2.2.1. Premium Diesel Fuel and Section 7.2.1. AKI Limits. No allowance shall be made for the precision of the test methods for aviation gasoline or aviation turbine fuels.

(Amended 2008)

7.2.3. SAE Viscosity Grades for Engine Oils. – All values are critical specifications as defined in the latest version of ASTM D3244, "Standard Practice for Utilization of Test Data to Determine Conformance with Specifications." The product shall be considered to be in conformance if the Assigned Test Value (ATV) is within the specification.

(Added 2008)

7.2.4. Dispute Resolution. – In the event of a dispute over a reported test value, the guidelines presented in the latest version of ASTM D3244, "Standard Practice for Utilization of Test Data to Determine Conformance with Specifications," shall be used to determine the acceptance or rejection of the sample.

7.2.5. Additional Enforcement Action. – The Director may initiate enforcement action in the event that, based upon a statistically significant number of samples, the average test result for products sampled from ~~**a particular person**~~ **the same source location** is greater than the legal maximum or less than the legal minimum limits (specification value), posted values, certified values, or registered values.

(Added 2008)

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