Laws and Regulations (L&R) Committee
2021 Interim Meeting Report

Mr. John McGuire, Committee Chair
New Jersey

INTRODUCTION

The Laws and Regulations Committee (hereinafter referred to as the "Committee") submits this Committee Interim Report for consideration by National Conference on Weights and Measures (NCWM). This report contains the items discussed and actions proposed by the Committee during its Interim Meeting in St. Pete Beach, FL, January 13 - 15, 2021. The report 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 acronyms for organizations and technical terms used throughout the agenda are identified in Table B. The first three letters of an item's reference key are assigned from the Subject Series List. The first three letters of an item's reference key are assigned from the Subject Series List. The status of each item contained in the report is designated as one of the following: **(V) Voting Item:** the committee is making recommendations requiring a vote by the active members of NCWM; **(I) Informational Item:** the item is under consideration by the Committee but not proposed for Voting; **(A) Assigned Item:** the Committee has assigned development of the item to a recognized subcommittee or task group within NCWM; **(D) Developing Item:** the Committee determined the item has merit; however, the item was returned to the submitter or other designated party for further development before any action can be taken at the national level; **(W) Withdrawn Item:** the item has been removed from consideration by the Committee.

Some Voting Items are considered individually; others may be grouped in a consent calendar. Consent calendar items are Voting Items that the Committee has assembled as a single Voting Item during their deliberation after the Open Hearings on the assumption that the items are without opposition and will not require discussion. The Voting Items that have been grouped into consent calendar items will be listed on the addendum sheets. Prior to adoption of the consent calendar, the Committee will remove specific items from the consent calendar upon request to be discussed and voted upon individually.

Committees may change the status designation of agenda items (Developing, Informational, Assigned, Voting and Withdrawn) up until the report is adopted, except that items which are marked Developing, Informational, Assigned or Withdrawn cannot be changed to Voting Status. Any change from the Committee Interim Report (as contained in this publication) or from what appears on the addendum sheets will be explained to the attendees prior to a motion and will be acted upon by the active members of NCWM prior to calling for the vote.

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***. Please refer to www.ncwm.com/publication-16 to review these documents.

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

Table B
Glossary of Acronyms and Terms

Acronym	Term	Acronym	Term
ACEA	European Automotive Manufacturer Standards	NEWMA	Northeastern Weights and Measures Association
ASTM	ASTM International	NIST	National Institute of Standards and Technology
API	American Petroleum Institute	NCWM	National Conference on Weights and Measures
CFR	Code of Federal Regulations	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	SAE	SAE International
FTC	Federal Trade Commission	SWMA	Southern Weights and Measures Association
HB	Handbook	UPLR	Uniform Packaging and Labeling Regulation
ILMA	Independent Lubricant Manufacturers Association	USDA – FSIS	U.S. Department of Agriculture – Food Safety and Inspection Service
L&R	Laws and Regulations	USNWG	U.S. National Work Group
LPG	Liquefied Petroleum Gas	WWMA	Western Weights and Measures Association
MAV	Maximum Allowable Variation		

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Table C
Voting Results

Reference Key Number	*House of State Representatives*		*House of Delegates*		*Results*
	Yeas	*Nays*	*Yeas*	*Nays*	
MOS-20.3	37	0	34	0	Positive Vote
B5: MOS-18.2	37	1	44	1	Positive Vote
B5: FLR-20.4	37	1	44	1	Positive Vote
B2: MOS-20.1	35	0	43	0	Positive Vote
B2: FLR-20.1	38	1	38	3	Positive Vote
B3: FLL-18-1	39	1	40	2	Positive Vote
To Accept the Report	45	0	0	0	Positive Vote

These items were designated as a "Voting" items by the Committee at the 2020 NCWM Interim Meeting. The NCWM was unable to hold an Annual Meeting in July 2020 due to restrictions of the COVID-19 pandemic. The NCWM was able to hold a virtual Annual Meeting in January 2021 at which it conducted a vote on the above items on the Committee's 2020 Agenda. These items were supported via a positive vote by those attending that January 2021 meeting. However, because NCWM bylaws require that official voting occur via in-person voting, the status of these items cannot be designated as "Adopted" until it is confirmed at the NCWM's next in-person meeting, which is anticipated to be in July 2021.

Details of All Items
(In order by Reference Key)

ITEM BLOCK 1 (B1) HB 130, UPLR, SEC. 2.8. MULTIUNIT PACKAGE. HB 133 MODIFY "SCOPE" FOR CHAPTERS 2 – 4, ADD A NOTE FOLLOWING SECTIONS 2.3.7.1. AND 2.7.3., CREATE A CHAPTER 5. SPECIALIZED TEST PROCEDURES AND HB133 APPENDIX F. GLOSSARY

B1: PAL-19.1	I	Section 2.8. Multiunit Package
B1: NET-19.1	I	Section 1.2.4. Maximum Allowable Variation
B1: NET-19.2	I	Modify "Scope" for Chapters 2 – 4, and a note following Section 2.3.7.1. Maximum Allowable Variation (MAV) Requirement and 2.7.3. Evaluation of Results – Compliance Determinations
B1: NET-19.3	I	Create a Chapter 5, Specialized Test Procedures
B1: NET-19.4	I	Appendix F. Glossary

(B1:NET-19.3, "Handbook 133, Create a Chapter 5. Specialized Test Procedures" must be adopted in order for the remainder of Item Block 1 to proceed.)

B1: PAL-19.1 I Section 2.8. Multiunit Package

Source:
NIST Office of Weights and Measures

Purpose:
Eliminate conflicts between the UPLR and Federal Trade Commission (FTC) regulation for multiunit packages cited in 16 CFR 500.27.

Item Under Consideration:
Amend Handbook 130, Uniform Packaging and Labeling Regulation as follows:

2.8. Multiunit Package. – A package containing two or more individual packages of the same commodity, in the same quantity, intended to be sold as a multiunit package~~**., but where the component packages are labeled individually in full compliance with all requirements of this regulation.**~~

B1: NET-19.1 I Section 1.2.4. Maximum Allowable Variation

Purpose:
Amend language regarding the total quantity declaration on multiunit or variety packages, when the MAV may need to be recalculated based on the Total Quantity MAV.

Item Under Consideration:
Amend Handbook 133, Chapter 1 as follows:

1.2.4. Maximum Allowable Variation

The limit of the "reasonable minus variation" for an under filled package is called a "Maximum Allowable Variation" (MAV). An MAV is a deviation from the labeled weight, measure, or count of an individual package beyond which the deficiency is considered an unreasonable minus error. Each sampling plan limits the number of negative package errors permitted to be greater than the MAV.

Packages may be offered for sale individually or offered for sale in multiunit packages or variety packages which contain two or more individual inner packages.

When packages are tested whether individual, multiunit, or variety packages, the MAV is applied to each package in the sample which has a minus package error.

When a total quantity declaration on a multiunit or variety package is being verified, and the MAV is not determined in terms of a percent of the labeled quantity, a "Total Quantity MAV" is compared to each minus Total Quantity Package Error(s) to determine if it is unreasonable.

Total Quantity Package Error = Sum of Individual Inner Package Errors

(Amended 2010 **and 20XX**)

Before determining the MAV and proceeding with tests of the quantity of contents in any multiunit or variety package, calculate the sum of the labeled quantity statements of all individual inner packages and verify that the labeled Total Quantity Statement reflects the accurate sum. If an error exists between the sum of the labeled quantity statements of individual inner packages and the Total Quantity Statement, the package is not in compliance and shall be deemed in violation of labeling requirements of NIST Handbook 130, Uniform Packaging and Labeling Regulation, requiring an accurate summing and statement of total quantity. Do not test for net quantity determination.

1.2.4.1. Total Quantity MAV for Multiunit and Variety Packages (See Chapter 5. "Specialized Test Procedures")

a. Multiunit Package. – In verifying a total quantity declaration that appears on a multiunit package compare a Total Quantity MAV to each minus Total Quantity Package Error to determine if the error is unreasonable. Calculate the Total Quantity MAV using the following formula:

Total Quantity MAV = Number of Individual Inner Packages × MAV for Individual Inner Package Quantity

Terms are defined as:

Number of Individual Inner Packages. – The total number of individual inner packages having a uniform labeled weight, measure and/or count.

MAV for Individual Inner Package Quantity. – The MAV for the labeled quantity for the individual inner packages specified in the proper table of MAVs in Appendix A. "Tables."

b. Variety Package. – In verifying a total quantity declaration that appears on a variety package, compare a Total Quantity MAV to each minus Total Quantity Package Error to determine if the error is unreasonable. Calculate the Total Quantity MAV using the following formula:

Total Quantity MAV = The sum of the applicable MAVs for all Individual Inner Packages

Variety packages include commodities that may be generically similar, but differ in weight, measure, volume, or design variation (e.g., color, flavor, scent, etc.) For these packages a Total Quantity MAV is calculated for each product type within the variety package and the results are added to obtain a Total Quantity MAV for comparison to each minus Total Quantity Package Error.

Terms are defined as:

Number of Individual Inner Packages. – The total number of similar but not identical individual inner packages with differing and/or uniform labeled weight or measure.

MAV for Individual Inner Package Quantity. – The MAV for the quantity declared for the individual inner packages specified in the appropriate MAV table in Appendix A. "Tables."

(Added 20XX)

B1: NET-19.2 I Sections 2.1. Scope, 3.1. Scope, 4.1. Scope, 2.3.7.1. Maximum Allowable Variation (MAV) Requirement, and Section 2.7.3. "Evaluation of Results – Compliance Determinations"

Purpose:
With the adoption of Handbook 133, Chapter 5. Specialized Test Procedures this item clarifies the language within Handbook 133.

Item Under Consideration:
Amend Handbook 133, Chapters 2, 3, and 4 as follows:

Add a Note to HB133, Chapter 2, Section 2.1. "Scope;" Section 3.1. "Scope;" and Section 4.1 "Scope" that refers users to the Chapter 5. "Specialized Test Procedures" for these types of packages.

Note: If Multiunit or Variety Packages are to be inspected, refer to Chapter 5. "Specialized Test Procedures" for guidance in testing.

If a total quantity declaration is being verified and the MAV to be applied is not based on a percentage of the labeled quantity, refer to Section 1.2.4.1. "Total Quantity MAV for Multiunit and Variety Packages."

(Added 20XX)

Add the following note to HB133, Chapter 2, Section 2.3.7.1 "Maximum Allowable Variation (MAV) Requirement" and Section 2.7.3. "Evaluation of Results – Compliance Determinations."

Note: If a total quantity declaration on a multiunit or variety package is being verified, and the MAV applied is not based on a percent of the labeled quantity see Section 1.2.4.1. "Total Quantity MAV for Multiunit and Variety Packages.

(Added 20XX)

B1: NET-19.3 I Create a Chapter 5. Specialized Test Procedures

Purpose:
Create new chapter in Handbook 133 that has specialized test procedures to verify the inner contents of multiunit and variety packages.

Item Under Consideration:
Amend Handbook 133, Chapter 5. Specialized Test Procedures as follows:

5.1. Scope

The following procedures are used in either verifying the net quantity of contents of retail multiunit packages with individual inner packages of the same commodity that have identically labeled quantities or in verifying retail variety packages with individual inner packages that differ in labeled weight, measure or volume.

1. The procedure used is determined by using the labeled net contents.

- **Use Section 5.2. "Individual Package Quantity" if a total net quantity of contents is not declared on the label of a multiunit or variety package of food for human consumption or meat or meat products from a USDA official establishment (see explanation in Section 5.2. for specific exemptions to requirement for a total net quantity statement.)**

- **Use Section 5.3. "Total Quantity" if a total net quantity of contents is declared on the package.**

Note: If the packages are labeled with additional quantity statements (i.e., dry volume, area, length, width, or thickness), added steps or, when proper, additional Total Quantity MAVs may be required in testing the accuracy of additional quantity statements.

5.2. Individual Package Quantity

This procedure is used only for verifying the total content statement of open or transparent-wrapped multiunit packages of foods for human consumption or meat or meat products under the authority of FDA or USDA, respectively. Under USDA-FSIS regulations (9 CFR 317.2 [h][12]) and FDA regulations (21 CFR 101.7 Chapter I [s]), such open multiunit packages that do not obscure the number of individual inner packages or the labeling of each individual inner package (compliant with all other location, type size, and applicable requirements) are not required to bear a total net quantity statement on the outside of the package (see Figure 1. Open or Transparent Multiunit Package with Fully Visible Individual Quantity Declarations).

Cereal Net Wt 100 g (3.5 oz)	Cereal Net Wt 100 g (3.5 oz)	Cereal Net Wt 100 g (3.5 oz)	Cereal Net Wt 100 g (3.5. oz)	Cereal Net Wt 100 g (3.5 oz)

Figure 1. Open or Transparent Multiunit Package with Fully Visible Individual Quantity Declarations

5.2.1. Test Procedure for Multiunit Packages Exempt from Total Quantity Statement (see Section 5.2.)

1. Follow Section 2.3.1. "Define the Inspection Lot." The inspection lot is defined as the total number of individual inner packages in the multiunit packages (e.g., 120 packages × 12 individual inner packages = Inspection Lot size is 1440). Select "Category A" or "Category B" sampling plan in the inspection (depending on location of test) and select a random sample (See Section 2.3.4. "Random Sample Selection").

2. Determine an average tare weight according to Section 2.3.5. "Procedures for Determining Tare and Average Tare Weight." Follow Section 2.3.6. "Determine Nominal Gross Weight and Package Errors" to determine package errors.

3. Determine the net quantity of each individual inner package in the sample.

- **If a count declaration is declared on the multiunit packages, verify using Section 4.2. "Packages Labeled by Count" and apply the appropriate MAV using Appendix A. Table 2- 7. MAV for Packages Labeled by Count applied.**

4. If minus package errors are found in the sample, the value of the MAV to be applied is determined by matching the labeled net quantity for the individual inner packages to the applicable quantity range in the appropriate MAV table using Appendix A "Tables".

Compare the MAV for the labeled quantity to each minus package error in the individual inner packages to determine if any are unreasonable using Section 2.3.7.1. "MAV Requirement". If the number of unreasonable errors exceeds the amount allowed for the sample size (see Appendix A. Tables 2-1. "Sampling Plans for Category A" or Table 2-2. "Sampling Plans for Category B." Column 4), the sample fails. If the sample passes, go to Step 5.

5. Apply Section 2.3.7.2. "Average Requirement." Follow the procedures in Section 2.3.7. "Evaluation for Compliance."

5.3. Total Quantity

Use this procedure to test multiunit packages labeled with a total count and/or total net quantity declaration. This procedure can be used to verify the total net quantity declared on open or closed multiunit packages or multiunit packages with transparent or opaque packaging. If the quantities of the individual inner packages vary (which is allowed in Variety Packages) or, if the quantity of the individual inner packages is not declared, see Section 5.4. "Exceptions".

Before determining the MAV and proceeding with tests of the quantity of contents in any multiunit package, calculate the sum of the labeled quantity statements of all individual inner packages and verify that the labeled Total Quantity Statement reflects the accurate sum. If an error exists between the sum of the labeled quantity statements of individual inner packages and the Total Quantity Statement, the package is not in compliance and shall be deemed in violation of labeling requirements of NIST Handbook 130 Uniform Packaging and Labeling Regulation, requiring an accurate summing and statement of total quantity. Do not test for net quantity determination.

5.3.1. Test Procedure for Multiunit Packages

1. Follow Section 2.3.1. "Define the Inspection Lot" to define the inspection lot (number of multiunit packages). Use the inspection lot size and select a "Category A" or "Category B" sampling plan (see Appendix A. "Tables") in the inspection plan and select a random sample. (see Section 2.3.2. "Select Sampling Plans" and Section 2.3.4. "Random Sample Selection").

2. For packages labeled by weight, determine the tare weight and nominal gross weight. Follow Section 2.3.5. "Procedures for Determining Tare" through Section 2.3.6. "Determine Nominal Gross Weight and Package Error" to determine package errors in the quantity of the individual inner packages as compared to the total package quantity declaration.

3. Determine the net quantity of each multiunit package and calculate the Total Quantity Package Error for each multiunit package.

The Total Quantity Package Error is the sum of the errors found in the individual inner packages.

Total Quantity Package Error = Sum of Individual Inner Package Errors

If applicable, verify the count declaration of the individual inner packages. To determine the MAV for count, use Appendix A. Table 2-7. "MAV for Packages Labeled by Count."

4. If minus Total Quantity package errors are found in the sample, use the MAV for the individual inner package labeled quantity. (see Section 1.2.4.1. "Total Quantity MAV for Multiunit and Variety Packages" and the appropriate MAVs in Appendix A "Tables"). Calculate the Total Quantity MAV to be applied to the total quantity of contents declaration as follows:

Total Quantity MAV = Number of Individual Inner Packages × MAV for Individual Inner Package Quantity

Note: A Total Quantity MAV is not required when the MAV to be applied is based on a percent of a labeled quantity of a multiunit or variety package.

5. The Total Quantity MAV is compared to each minus Total Quantity Package Error to determine if any errors are unreasonable (See Section 2.3.7.1. "MAV Requirement").

- **If the number of unreasonable errors exceeds the number allowed for the sample size the sample fails. (See Section 2.3.1. "Define the Inspection Lot" and Tables 2-1 or 2-2, Column 4).**

5.4. Exceptions for Multiunit Packages

5.4.1. Multiunit Packages with Only a Total Quantity Declaration

NIST Handbook 130, Uniform Packaging and Labeling Regulation (UPLR), Section 10.4. "Multiunit Packages" states that unlabeled individual packages not intended for individual retail sale are only required to declare a total quantity declaration (see Figure 2. Multiunit Package [three packages] with only a Total Quantity Declaration). While not required, UPLR, Section 10.4. "Multiunit Packages" does allow for multiunit packages to include an optional statement for the count of the individual inner packages despite their not being fully labeled or intended for individual retail sale.

Floor Cleaner	**Floor Cleaner** **NET WEIGHT 15 kg (33 LB)**	**Floor Cleaner**

Figure 2. Multiunit Package (three packages) with only a Total Quantity Declaration

5.4.1.1. MAV Application

When multiunit package label does not include a quantity statement for each individual inner package (e.g., only a total quantity appears) a Total Quantity MAV cannot be applied because the quantities in the individual inner packages are unknown. In this case, the MAV value for the total quantity declaration as listed in the MAV tables (See Appendix A. Tables) is compared to the Total Quantity Package Error to determine if any package errors are unreasonable (see Section 2.3.7.1. "MAV Requirement").

5.4.2. Variety Packages: Non-Uniform Quantity Declarations

UPLR, Section 10.6. "Variety Packages" states that a variety package is required to have total quantity declaration. The commodities may be generically similar; however, they can differ in weight, measure, volume, or style variation (e.g. color, flavor, scent, etc.). When the labeled weight, measure or count varies, the value of the applicable MAV can also vary.

When variety packages are tested, the procedure used to calculate a Total Quantity MAV requires the summing of the MAV values over the number of inner packages of all types. An example is shown in Figure 3. Variety Package – Four Similar but Different Products with Varying Net Weights) to illustrate a total quantity declaration, count, and the weight of the individual inner packages.)

30 Candy Bar – Variety Pack **Total Net Weight 1.33 kg (2.9 LB)**	
10 – 55 g (1.9 oz)	**6 – 30 g (1.1 oz)**

Peanut Butter Cups	Dark Chocolate Bars
6 – 46 g (1.6 oz) Milk Chocolate Bars with Almonds	8 – 41 g (1.5 oz) Milk Chocolate Bars

Figure 3. Variety Package – Four Similar but Different Products with Varying Net Weights

5.5. Test Procedure for Variety Packages Containing Individual Packages with Varying Net Weights

Before determining the MAV and proceeding with tests of the quantity of contents in any variety package, calculate the sum of the labeled quantity statements of all individual inner packages and verify that the labeled Total Quantity Statement reflects the accurate sum. If an error exists between the sum of the labeled quantity statements of all individual inner packages and the Total Quantity Statement, the package is not in compliance and shall be deemed in violation of labeling requirements of NIST Handbook 130 Uniform Packaging and Labeling Regulation, requiring an accurate summing and statement of total quantity. Do not test for net quantity determination.

1. **When a variety package with individual inner packages with varying net weights is tested, the average tare weight (e.g., packaging from the individual inner packages and the outer package combined) is determined and a nominal gross weight is used to determine the error in the total quantity declaration.**

   Total Quantity Package Error = Sum of Individual Inner Package Errors

   MAVs used in calculating the Total Quantity Package MAV are based on the respective labeled quantities of each product type and are calculated for each product type within the variety package. The calculated MAVs for each of the product types are summed to obtain the Total Quantity MAV (See example shown in Table 1. Steps in Calculating a MAV for a Variety Package).

5.6. MAV Application

A Total Quantity MAV must be applied because the labeled quantities and MAVs of the individual inner packages vary. For example, based on the quantity of the total net weight (as shown in Figure 3. Variety Package- Four Similar but Different Products with Varying Net Weights) the MAV for 1.33 kg (2.9 LB) is 42.6 g (0.094 LB) but the "Total Quantity MAV" to be applied is 122.4 g (4.261 oz) (0.27 lb)(See example shown in Table 1. Steps in Calculating a MAV for a Variety Package).

Table 1. Steps in Calculating a MAV for a Variety Package (Based on Figure 3. Variety Package – Four Similar but Different Products with Varying Net Weights)

Product	Number of Inner Packages	Labeled Net Weight (each individual inner package)	MAV for each Individual Inner Package Based on the Labeled Net Quantity (see MAV Table 2-5)	Total MAV
Peanut Butter Cups	10	55 g (1.94 oz)	5.4 g (0.1875 oz)	10 × 5.4 = 54 g (10 × 0.1875 oz = 1.875 oz)
Dark Chocolate Bars	6	30 g (1.06 oz)	10 % of labeled quantity	6 × (0.1 × 30) = 18 g 6 × (0.1 × 1.06 oz) = 0.636 oz

Milk Chocolate Bars	**8**	**41 g (1.45 oz)**	**3.6 g (0.125 oz)**	**8 × 3.6 = 28.8 g (8 × 0.12 oz = 1 oz)**
Milk Chocolate Bars with Almonds	**6**	**46 g (1.62 oz)**	**3.6 g (0.125 oz)**	**6 × 3.6 = 21.6 g (6 × 0.125 oz = 0.75 oz)**
			Total Quantity MAV	**122.4 g (4.261 oz) (0.27 LB)**

(Added 20XX)

B1: NET-19.4 I Appendix F. Glossary

Purpose:
This will add definitions for multiunit, variety and total quantity MAV into Handbook 133, Appendix F.

Item Under Consideration:
Amend Handbook 133, Appendix F as follows:

Multiunit Package. - A package containing two or more individual packages of the identical commodity, in the same quantity, intended to be sold as a multiunit package

Variety Package. – A package intended for retail sale, containing two or more individual packages or units of similar, but not identical, commodities. Commodities that are generically alike, but that differ in weight, measure, volume, or style variation (e.g. color, flavor, scent, etc.) are considered similar, but not identical.

Total Quantity MAV. – A calculated value used to determine if any minus Total Quantity Package Error found in a multiunit or variety packages are unreasonable. A Total Quantity MAV is based on the declared quantity and count of the individual inner packages. It is determined by obtaining the applicable MAV for each individual inner package quantity from the appropriate Mav table (refer to Appendix A. "Tables" and then calculating the "Total Quantity MAV" as follows:

- **Multiunit Package: *Total Quantity MAV = Number of Individual Inner Packages × MAV for Individual Inner Package Quantity***
- **Variety Package: *Total Quantity MAV = The sum of the applicable MAVs for all Individual Inner Packages.***

Note: A Total Quantity MAV is not used when the MAV applied is based on the percentage of the labeled quantity on a multiunit or variety package

Note: Total Quantity Package Error = Sum of Individual Inner Package Errors.

Background/Discussion:
This item was originally submitted and developed by:

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When current test procedures in Handbook 133 are used and an MAV is applied to the total quantity declaration on some multiunit and variety packages the MAV allowed for the individual inner packages can indirectly be reduced as much as 50% or more, depending on the number of individual items in the package. This proposal modifies Handbook

133 to add language regarding the total quantity declaration on multiunit or variety packages, when the MAV may need to be recalculated based on the Total Quantity MAV.

When a total quantity declaration on a multiunit or variety package is verified it will require the inspector, except when the MAV is based on a percentage of the labeled quantity, to calculate and use a "Total Quantity MAV." This calculation will determine if minus package errors are unreasonable (an unreasonable error is a minus package error that exceeds an MAV specified in the proper table of MAVs in Handbook 133, Appendix A. "Tables") A "Total Quantity MAV" is calculated by multiplying the number of individual inner packages by the MAV value, which is based on the declared quantity of the individual inner packages. It is found by looking up the MAV for the individual inner package quantity (See Handbook 133, Appendix A. "Tables") and then calculating the "Total Quantity MAV." This test procedure will be used to assist inspectors with their inspection.

NCWM 2019 Interim Meeting: Comments were heard recognizing the merit of this item. Several regulators and an industry member made comments that some areas within the test procedure are too confusing. Mr. Tim Chesser (Arkansas) remarked that he does not understand Item Net 3. Section 5.4.1.1. MAV Application. Mr. Kurt Floren (Los Angeles County, California) submitted editorial changes. The Committee accepted these revisions for the entire Item Block 1. In addition, the Committee would like NIST/OWM to address Mr. Floren's comments for Item NET-3. Chapter 5. Specialized Test Procedures will be reviewed by the NIST/OWM. Due to the Federal Government furlough, NIST OWM was not in attendance, so concerns could not be addressed at the meeting. The Committee would like the submitter to review formatting, clarifying label quantity, and modifying language for additional clarity. The Committee would like to see the above issues reviewed by the submitter and encourages further development.

NCWM 2019 Annual Meeting: Ms. Warfield stressed to membership that this item is fully developed and a technical document with supporting data were submitted to support these proposals. It also presented issues that inspectors found pertaining to multi-unit and variety packages during inspections. NIST also addressed the WWMA comments in the latest Item under Consideration. There were no additional comments heard at the Annual Meeting.

NCWM 2020 Interim Meeting: An update on the last language submitted for this item on December 27, 2019 was provided by Ms. Warfield. She remarked the work done to develop the proposal and clarify the procedure language. Ms. Warfield reminded the audience NET-19.3 creates a Chapter 5, "Specialized Test Procedures" must be approved for the rest of the items in the block to proceed. This block of items was submitted by OWM after some states requested assistance inspecting these types of packages. Mr. Chris Guay (Procter and Gamble Co.) gave merit to the item but requested review of the definition of Multiunit Package and referred to the definition in CFR 21. Mr. Kurt Floren (Los Angeles County, California) expressed his support for the item but pointed out some punctuation and editorial changes were needed. He said wording in Section 5.4.3 can be improved for clarity. Ms. Ann Boeckman (Kraft Heinz Foods Co.) also expressed concerns about the definition of multiunit package for retail sale. Opinions from Ms. Angela Godwin (Ventura County, California) and Ms. Katherine deContreras (California) were heard during the open hearing; both agreed the procedure is confusing and needs additional work but, both concur the item has merit.

There were concerns that membership may not have reviewed the modifications submitted by NIST OWM in December 2019. There was some confusion as to whether members comments were still valid since they did not review the latest language. All comments received gave merit to the blocked Item but, some still expressed concern about the definitions of multiunit packages for retail sale and others found the language of the procedure to be confusing. Based on the comments, the L&R Committee would like the submitter to review possible issues with the definition of Multiunit packages and, to work on the procedure language to improve clarity. The L&R Committee recommends the Item Block 1 be Informational to allow the submitter to do an additional review.

NCWM 2020 Annual Meeting: Due to the 2020 Covid-19 pandemic, this meeting was adjourned to January 2021, at which time it was held as a virtual meeting. Due to constraint of time, only those items designated as 2020 Voting Items were addressed. All other items were addressed in the subsequent 2021 NCWM Interim Meeting.

NCWM 2021 Interim Meeting: Mr. Floren expressed concerns that the language in certain areas of B1: NET-19.1 and B1: NET-19.3 could use some clarity. He also recommends that the Committee consider adding in additional information directing the user to the federal regulations for USDA/FSIS and FDA for packaged foods for human consumption.

Ms. Warfield remarked there is a document that provides the varying definitions for multiunit from FTC, FDA, and USDA regulations. The Committee does have a copy to assist them in deciding to how to proceed with this block. She expressed concern that at NCWM and regional meetings there is not specific feedback as to what is required to get this item voting status. NIST OWM has provided all supporting data and technical papers to explain how this information was developed. She suggested that if the Committee is unable to elevate this to "voting" status then they should withdraw and NIST would incorporate this procedure within their Handbook 133 training courses.

Mr. Floren and Ms. Warfield agreed to work in preparing Mr. Floren's recommendations for acceptance and incorporation into the reporting.

The following recommendations that reflected with either a double underscore or double strikethrough:

B1: NET-19.1. changes:

1.2.4. Maximum Allowable Variation

The limit of the "reasonable minus variation" for an underfilled package is called a "Maximum Allowable Variation" (MAV). An MAV is a deviation from the labeled weight, measure, or count of an individual package beyond which the deficiency is considered an unreasonable minus error. Each sampling plan limits the number of negative package errors permitted to be greater than the MAV.

Packages may be offered for sale individually or offered for sale in multiunit packages or variety packages, which contain two or more individual inner packages.

When ~~individual~~ packages are tested whether individual, multiunit, or variety packages, the MAV is applied to each package in the sample which has a minus package error.

Add a paragraph to make it clear to the inspector how to handle a package that is not in compliance and due to a Packaging and Labeling Regulation violation:

Before determining the MAV and proceeding with tests of the quantity of contents in any multiunit or variety package, calculate the sum of the labeled quantity statements of all individual inner packages and verify that the labeled Total Quantity Statement reflects the accurate sum. If an error exists between the sum of the labeled quantity statements of individual inner packages and the Total Quantity Statement, the package is not in compliance and shall be deemed in violation of labeling requirements of NIST Handbook 130, Uniform Packaging and Labeling Regulation, requiring an accurate summing and statement of total quantity. Do not test for net quantity determination.

1.2.4.1. Total Quantity MAV for Multiunit and Variety Packages (See Chapter 5. "Specialized Test Procedures")

a. Multiunit Package. – In verifying a total quantity declaration that appears on a multiunit package, compare a Total Quantity MAV to each minus Total Quantity Package Error to determine if the error is unreasonable. Calculate the Total Quantity MAV using the following formula:

b. Variety Package. – In verifying a total quantity declaration that appears on a variety package, compare a Total Quantity MAV to each minus Total Quantity Package Error to determine if the error is unreasonable. Calculate the Total Quantity MAV using the following formula:

Total Quantity MAV = The sum of the applicable MAVs for all Individual Inner Packages

Variety packages include commodities that may be generically similar, but differ in weight, measure, volume, or ~~appearance~~ design variation (e.g., color, flavor, scent, etc.). For these packages, a Total Quantity MAV is calculated for each product type within the variety

package and the results are added to obtain a Total Quantity MAV for comparison to each minus Total Quantity Package Error.

Changes to B1: NET-19.3 are reflected below:

5.1. Scope

The following procedures are used in either verifying the net quantity of contents of retail multiunit packages with individual inner packages of the same commodity that have identically-labeled quantities or in verifying retail variety packages with individual inner packages that differ in labeled weight, measure or volume.

1. The procedure used is determined by using the labeled net contents.

- **Use Section 5.2. "Individual Package Quantity" if a total net quantity of contents is not declared on the label of a multiunit or variety package of food for human consumption or meat or meat products from a USDA official establishment (See explanation in Section 5.2. of specific exemptions to requirement for a total net quantity statement).**

- **Use Section 5.3. "Total Quantity" if a total net quantity of contents is declared on the package.**

Note: If the packages are labeled with additional quantity statements (i.e., dry volume, area, length, width, or thickness), added steps or, when proper, additional Total Quantity MAVs may be required in testing the accuracy of such additional quantity statements.

Changes to Section 5.2. will add additional language to clarify how to inspect packaged foods for human consumption. The CFR links are hyperlinked to provide the inspector direct access to the CFR information if they are using an online handbook.

5.2. Individual Package Quantity

This procedure is used only for verifying the total content statement of open or transparent-wrapped multiunit packages of foods for human consumption or meat or meat products under the authority of FDA or USDA, respectively. Under USDA FSIS regulations (9 CFR 317.2 [h][12]) and FDA regulations (21 CFR 101.7 Chapter I [s]), such open multiunit packages that do not obscure the number of individual inner packages or the labeling of each individual inner package (compliant with all other location, type size, and applicable requirements) are not required to bear a total net quantity statement on the outside of the package (see Figure 1. Open or Transparent Multiunit Package with Fully Visible Individual Quantity Declarations).

The capture for Figure one should be clarified to read, Figure 1. Open or Transparent Multiunit Package (containing two rows of packages) with Fully Visible Individual Quantity Declarations

5.2.1. Test Procedure for Multiunit Packages Exempt from Total Quantity Statement (See Section 5.2)

Step 4 in this section should be clarified to read: **If minus package errors are found in the sample, the value of the MAV to be applied is determined by matching the labeled net quantity for the individual inner packages to the applicable value in the appropriate MAV table (see Appendix A "Tables").**

Add a statement to Section 5.3. Total Quantity to make it clear to the inspector how to handle a package that is not in compliance and due to a Packaging and Labeling Regulation violation:

Before determining the MAV and proceeding with tests of the quantity of contents in any multiunit package, calculate the sum of the labeled quantity statements of all individual inner packages and verify that the labeled Total Quantity Statement reflects the accurate sum. If an error exists between the sum of the labeled quantity statements of individual inner packages and the Total Quantity Statement, the package is not in compliance and shall be deemed in violation of labeling requirements of NIST Handbook 130 Uniform Packaging and

Labeling Regulation, requiring an accurate summing and statement of total quantity. Do not test for net quantity determination.

5.4. Exceptions for Multiunit Packages

5.4.1. Multiunit Packages with Only a Total Quantity Declaration

NIST Handbook 130, Uniform Packaging and Labeling Regulation (UPLR), Section 10.4. "Multiunit Packages" states that when containing unlabeled individual packages and not intended for individual retail sale, the multiunit package only requires a total quantity declaration (see Figure 2. Multiunit Package [three packages] with only a Total Quantity Declaration). While not required, UPLR, Section 10.4. "Multiunit Packages" does allow for multiunit packages to include an optional statement for the count of the individual inner packages despite their not being fully labeled or intended for individual retail ~~sale even when the UPLR, Section 10.4. "Multiunit Packages" regulations do not require such a statement~~.

5.5. Test Procedure for Variety Packages Containing Individual Packages with Varying Net Weights

When a variety package with individual inner packages of varying net weights is tested, the average tare weight (e.g., packaging from the individual inner packages and the outer package combined) is determined and a nominal gross weight is used to determine the error in the total quantity declaration.

Changes for B1: NET-19. 4 appear below:

Multiunit Package. - A package containing two or more individual packages of the identical commodity, in the same quantity, intended to be sold as a multiunit package

Variety Package. – A package intended for retail sale, containing two or more individual packages or units of similar, but not identical, commodities. Commodities that are generically alike, but that differ in weight, measure, volume, ~~appearance~~ or style variation (e.g., color, flavor, scent, etc.) ~~or quality~~, are considered similar, but not identical.

Total Quantity MAV. – A calculated value used to determine if any minus Total Quantity Package Error found in a multiunit or variety package is unreasonable. A Total Quantity MAV is based on the declared quantity and count of the individual inner packages. It is determined by obtaining the applicable MAV for each individual inner package quantity from the appropriate MAV table (refer to Appendix A. "Tables") and, then, calculating the "Total Quantity MAV" as follows:

- **Multiunit Package:**
  Total Quantity MAV = Number of Individual Inner Packages × MAV for Individual Inner Package Quantity

- **Variety Package:**
  Total Quantity MAV = The sum of the applicable MAVs for all Individual Inner Packages

Several regulators spoke in support of having this item further developed based upon comments from Mr. Floren. They persuaded the Committee from removing any of the Items from the Block that were deemed fully developed and ready for Voting status. This will allow the item to move forward together since the language impacts the various sections.

Mr. Guay (Retired) does like the intent of the proposal but struggles with removing language from the definition of a multiunit package. Currently this definition is well understood by industry. Mr. Ed Coleman (TN) remarked that this test procedure appears to be a very involved process and questioned if this could only be done in a point of pack. Mr. Coleman remarked their state would normally do an audit test at retail locations and he is unsure how practical this procedure is.

During the Committee work session, there was limited time for the Committee to revise the language. The Committee approved the recommendations addressed by Mr. Floren and NIST and they are incorporated in the most recent language for consideration. The Committee is also recommending this language remain Informational status to obtain feedback from the Regional Associations.

Regional Association Comments:

WWMA 2019 Annual Meeting: Mr. Kurt Floren (Los Angeles Co., CA) commented that he submitted his changes to the language to NIST/OWM. Ms. Warfield (NIST OWM) will immediately forward to the three upcoming regional meetings, the updated language presented at the WWMA for inclusion in their regional reports. Based off comments heard the WWMA supports the concept of this item and encourages NIST to include changes presented at the WWMA in developing this item. The Committee recommends this item remain Developing.

SWMA 2019 Annual Meeting: In B1:NET 19.1. Section 1.2.4. there is a sentence that appears to be duplicated in the report. The language appearing with double strikethrough below should be removed.

1.2.4. Maximum Allowable Variation

The limit of the "reasonable minus variation" for an under filled package is called a "Maximum Allowable Variation" (MAV). An MAV is a deviation from the labeled weight, measure, or count of an individual package beyond which the deficiency is considered an unreasonable minus error. ~~**Each sampling plan limits the number of negative package errors permitted to be greater than the MAV, unreasonable minus error.**~~ Each sampling plan limits the number of negative package errors permitted to be greater than the MAV. **Packages are offered for sale individually or in multiunit packages which may contain two or more individual inner packages. When individual packages are tested the MAV is applied to each package in the sample which has a minus package error. When a total quantity declaration on a multiunit or variety package is verified, and the MAV is not determined in terms of a percent of the labeled quantity, a "Total Quantity MAV" is compared to the minus Total Quantity Package Error(s) to determine if they are unreasonable.**

In B1:NET19.2. the Header title needs to be amended to include 2.7.3. "Evaluation Results."

The SWMA is recommending that the submitter review the language for clarity. In Item B1:NET-19.3 Section 5.1. the first sentence needs to be broken into separate sentences for clarity reasons. The Committee does believe this item has merit. The Committee is requesting that the submitter continue to work to simplify the test procedure. The Committee does not believe it is necessary to have Section 5.2. Individual Package Quantity. For the reasons mentioned above the Committee is recommending this as a Developing item.

NEWMA 2019 Interim Meeting: There were no comments heard during open hearings. The Committee believes this item needs further vetting through the regions and PALS should continue to develop these items.

2020 Regional Meetings of the WWMA, NEWMA, and SWMA: These regions adhered to a condensed agenda due to the Covid pandemic and did not consider this item.

CWMA 2020 Interim Meeting: Ms. Lisa Warfield (NIST OWM) commented that this item has been on the agenda since 2019. Ms. Warfield said that during development of this item, the only input received was a comment regarding the term multi-unit retail, which NIST does not object to. Ms. Warfield explained that federal agencies have different definitions for the term "multi-unit." Ms. Warfield wants to get any additional feedback to be sure the language is clear, concise, and fully vetted. The Committee believes this item is fully developed and is ready for Voting status.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.com/publication-16 to review these documents.

PAL – UNIFORM PACKAGING AND LABELING REGULATION

PAL-21.1 V Section 11.XX. Bacon and 11.19. Margarine

Source:
NIST Office of Weights and Measures

Purpose:
Add language for shingle sliced packed bacon to align with USDA Labeling requirements, 9 CFR § 317.2 - Labels: definition; required features.

Item Under Consideration:
Amend Handbook 130, Uniform Packaging and Labeling Regulation as follows:

11.XX. Bacon – Bacon packaged as sliced shingles in rectangular packages shall be exempt from the requirement in this regulation for location (see Section 8.1.1. Location) of the net quantity declaration. The statement of net quantity shall appear in a clear and conspicuous manner on the principal display panel. (see 9 CFR 317.2)

(Added 20XX)

11.19 Margarine. – Margarine in 1 lb rectangular packages, except for packages containing whipped or soft margarine or packages containing more than four sticks, shall be exempt from the requirement in this regulation for location (see Section 8.1.1. Location) of the net quantity. **The statement of net quantity shall appear in a clear and conspicuous manner on the principal display panel. (see 9 CFR 317.2)**

(Amended 1978, **and** 1993, **and 20XX)**

Previous Action:
- N/A

Original Justification:
This will align the Handbook 130 model regulation with USDA/FSIS requirements for labeling of sliced shingle packaged bacon as referenced in 9 CFR § 317.2 - Labels: definition; required features. It states:

(v) Sliced shingle packed bacon in rectangular packages is exempt from the requirements of paragraphs (h)(3) and (h)(5) of this section regarding the placement of the statement of the net quantity of contents within the bottom 30 percent of the principal display panel, and that the statement be expressed both in ounces and in pounds, if the statement appears in a conspicuous manner on the principal display panel.

Example of Sliced Shingle Packed Bacon

The submitter requested Voting status for this Item in 2021.

Arguments in Favor:

Regulatory:
- Many regulators voiced their support for this item so that the handbook aligns with federal regulations.
- Regulators also support the inclusion for the changes to Section 11.19. Margarine.

Industry:
- None heard

Advisory:
- Ms. Warfield (NIST OWM) informed membership that NEWMA and CWMA were the only two regions to discuss Section 11.19 Margarine and they were both in full support.

Arguments Against:

Regulatory:
- No Comments

Industry:
- No Comments

Advisory:
- No Comments

Item Development:
Not Applicable.

Background/Discussion:
NCWM 2021 Interim Meeting: The Committee heard support to move both the bacon and margarine together as one item. There is no conflict with this language since it is extracted from a federal CFR. The Committee recommended the original item under consideration be also include the language modification for Section 11.14. Margarine.

Regional Association Comments:

WWMA 2020 Annual Meeting: Ms. Lisa Warfield (NIST OWM, submitter) provided testimony as to the purpose of this proposal, which is to harmonize Handbook 130 model regulation pertaining to labeling of sliced shingle packaged bacon with USDA/FSIS requirements. The Committee received comments from Mr. Kurt Floren (Los Angeles Co., CA), indicating that while he sees the need for alignment with USDA regulations, he also believes it is important to retain the requirement that the net quantity declaration appear in a conspicuous manner on the principal display panel.

The WWMA L&R Committee recommends this as a Voting item provided the additional language, indicated by a double underline below is added.

11.XX. Bacon – Bacon packaged as sliced shingles in rectangular packages shall be exempt from the requirement in this regulation for location (see Section 8.1.1. Location) of the net quantity declaration. However, such exemption shall not apply to the requirement for the net quantity declaration to appear in a conspicuous manner on the principal display panel.

SWMA 2020 Annual Meeting: Ms. Lisa Warfield (NIST OWM) remarked that they submitted this proposal to add the USDA labeling requirements for bacon to HB130, UPLR. If adopted this language would appear in Section 11. Exemptions. When drafting this proposal, the exemption for bacon was only for the location (UPLR, Section 8.1.1.) We were not exempting bacon from UPLR, Sections 8.1.2. and 8.1.3. that requires the net quantity to be conspicuous. The bacon language mirrors the language found for margarine under Section 11.19. Both margarine and bacon exemptions are found within 9 CFR 317.2. If the Committee agrees language for conspicuous needs to be addressed, NIST OWM recommends adding a sentence "The statement of net quantity shall be clear and conspicuous on the

principal display panel. (refer to 9 CFR 317.2). The Committee received comments from Mr. Tim Chesser (AR) in support of the Item with alternative language to include clear and conspicuous.

Comments were also received from Ms. Elizabeth Koncki (MD) requesting clarification where the proposal was going, and she preferred to add the conspicuous language.

The SWMA L&R Committee recommends this as a Voting item provided the additional language, indicated by a double underline below is added.

> **11.XX. Bacon – Bacon packaged as sliced shingles in rectangular packages shall be exempt from the requirement in this regulation for location (see Section 8.1.1. Location) of the net quantity declaration. The statement of net quantity shall be clear and conspicuous on the principal display panel. (see 9 CFR 317.2)**

NEWMA 2020 Interim Meeting: Ms. Warfield worked with Mr. Floren on updating the language in the proposal. The modified language was submitted for consideration by the Committee. It was requested that the Committee should also apply the same language to margarine. These changes would align language with USDA's CFR. The Committee concurred and recommended the updated proposal as shown below, be a Voting item.

> **11.XX. Bacon – Bacon packaged as sliced shingles in rectangular packages shall be exempt from the requirement in this regulation for location (see Section 8.1.1. Location) of the net quantity declaration. The statement of net quantity shall appear in a clear and conspicuous manner on the principal display panel. (see 9 CFR 317.2)**
>
> **11.19 Margarine. –** Margarine in 1 lb rectangular packages, except for packages containing whipped or soft margarine or packages, containing more than four sticks, shall be exempt from the requirement in this regulation for location (see Section 8.1.1. Location) of the net quantity. **The statement of net quantity shall appear in a clear and conspicuous manner on the principal display panel. (see 9 CFR 317.2)**

CWMA 2020 Interim Meeting: Ms. Lisa Warfield (NIST OWM) commented that this item is intended to reaffirm that UPLR Section 11.19. Margarine should have the same language that was accepted by NEWMA, which will align language with USDA's CFR. The Committee discussed the option of adding Section 11.19. Margarine to the Item title above and suggests that the NCWM L&R Committee change the title to reflect the change below for Section 11.19. Margarine. Based on Committee discussion, the item is fully developed and ready for Voting status.

> **11.XX. Bacon – Bacon packaged as sliced shingles in rectangular packages shall be exempt from the requirement in this regulation for location (see Section 8.1.1. Location) of the net quantity declaration. The statement of net quantity shall appear in a clear and conspicuous manner on the principal display panel. (see 9 CFR 317.2)**
>
> **11.19. Margarine. –** Margarine in 1 lb rectangular packages, except for packages containing whipped or soft margarine or packages, containing more than four sticks, shall be exempt from the requirement in this regulation for location (see Section 8.1.1. Location) of the net quantity. **The statement of net quantity shall appear in a clear and conspicuous manner on the principal display panel. (see 9 CFR 317.2)**

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.com/publication-16 to review these documents.

MOS – UNIFORM REGULATION FOR THE METHOD OF SALE OF COMMODITIES

MOS-20.5 V Section 2.21. Liquefied Petroleum Gas

Source:
Arizona Department of Agriculture, Weights and Measures Services Division

Purpose:
Provide clarity and consistency regarding the method of sale (MOS) for liquefied petroleum gas (LPG) through a meter that has a maximum rated capacity of 20 gal/min or less.

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

2.21. Liquefied Petroleum Gas.

2.21.1. Method of Sale. – 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 **following methods of sale. If kept, offered, exposed for sale, or sold by:**

(a) Weight: by the **kilogram** or pound; or by,

(b) Gaseous Volume: by the metered cubic meter of vapor (defined as 1 m^3 at 15 °C); or metered cubic foot of vapor (defined as 1 ft^3 at 60 °F) [**See Section 2.21. Note** ~~7, page 131~~ **below**]; or by,

(c) Liquid: **by the liter (defined as 1 liter at 15 °C) or** the gallon (defined as 231 in^3 at 60 °F). ~~**All metered sales by the or 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**~~.

2.21.2. Metered Sales by Liquid Volume. – All metered sales by liquid volume shall be accomplished using metering systems as follows:

(a) Sales using metering systems with a maximum rated capacity greater than or equal to 20 gal/min shall be accomplished by the use of a meter and device that automatically compensates for the effects of temperature.

(b) Sales using metering systems with a maximum rated capacity less than 20 gal/min that were placed into service after January 1, 2023 shall be accomplished by use of a meter and device that automatically compensates for the effects of temperature.

(c) Effective January 1, 2030, all metered sales (through all capacities of metering devices, regardless of installation and service date) shall be accomplished by use of a meter and device that automatically compensates for temperature.

Section 2.21. NOTE ~~***8:***~~ *Sources:* ~~***American National Standards Institute, Inc.,***~~ *ANSI B109.1 (*~~***2008***~~***2000****), "*~~***American National Standard***~~ *For Diaphragm-Type Gas Displacement Meters (*~~***14.16 Cubic Meters [***~~***Under****500 Cubic Feet***~~***]***~~ *Per Hour Capacity* ~~***and Under***~~*), " and NIST Handbook 44, "Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices."*

(Added 1986**, Amended 20XX**)

Background/Discussion:
There appears to be a lack of clarity and consistency regarding the method of sale (MOS) for liquefied petroleum gas (LPG) through a meter that has a maximum rated capacity of 20 gal/min or less. The Uniform Regulation for the Method of Sale of Commodities, Section 2.2. Liquified Petroleum Gas specifically exempts these meters from the use

of automatic temperature compensation but defines a gallon as 231 in^3 at 60 °F [15.6 °C]. With this definition, it can be interpreted that, while automatic temperature compensation is not required, the sale of LPG shall be temperature compensated through manual means (or alternatively sold by weight). Temperature compensation manually requires the use temperature readings and a chart to manually perform conversions to determine the volume sold.

When discussing potential implementation of these requirements, propane industry officials in Arizona noted that other states do not require sale of LPG through these smaller meters to be temperature compensated or sold by weight and cited numerous problems with manual calibration or changing the MOS to sell by weight. An informal survey of western states appears to support that most do not enforce this requirement to sell LPG through these smaller meters by weight or temperature compensated.

Due to the inconsistency with the method of sale between various states and interpretation of this section, it is being proposed to exempt the sale of LPG through these smaller meters from temperature compensation. The item is proposed developing to allow for discussion and submittal of supporting cost analysis and impact to consumers and businesses that supports a requirement to sell LPG through these small meters as temperature compensated (or by weight).

The submitter noted that the sale of propane that is not temperature compensated can vary in quantities dispensed, which may provide a business or consumer with more or less product than stated.

NCWM 2020 Interim Meeting: Mr. Tim Chesser (AR) felt that the current proposal conflicts with language in Handbook 44. Ms. Tina Butcher (NIST OWM) responded the current language in Handbook 44 does not conflict with the language in this item, referencing language from Handbook 44 stating "If a device is equipped with an automatic temperature compensator." This suggests that language in Handbook 44 does not require modification to accommodate devices with automatic temperature compensation capabilities. Mr. Constantine Cotsoradis (Flint Hill Resources) questioned if this proposal would have any benefit for consumers. Representing the submitter, Mr. Vince Wolpert (AZ) stated that temperature in the state ranges from 32 to 100 degrees Fahrenheit and volume delivered for LP sales varies accordingly. As a result of the lack of consistency with volume delivered the state receives a lot of complaints concerning LP sales. Several regulators commented that the most equitable way to address the issue is to require automatic temperature compensation for all sales. The submitter received feedback from the fall regions and modified the language (dated January 24, 2020). The submitter, Ms. Wilson recommends that this modified language be vetted through the regional meetings and industry for consideration. Currently, the Committee concurs with this recommendation and moves this item forward as the Item Under Consideration as Informational.

On the 2020 NCWM Interim Agenda the item under consideration appeared as:

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 132] of vapor (defined as 1 ft3 at 60 °F [15.6 °C]), or the gallon (defined as 231 in3 at 60 °F [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. **Metered sales using a meter with a maximum rated capacity of 20 gal/min or less is exempt from temperature compensation requirements.**
(Added 1986 **Amended 20XX)**

NCWM 2021 Interim Meeting: Mr. Tim Chesser (AR) commented regarding his concern with conflicts between the method of sale and Handbook 44 requirements.

At the 2021 NCWM Interim Meeting the language within NCWM Publication 15 appeared as:

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 132] of vapor (defined as 1 ft^3 at 60 °F [15.6 °C]), or the gallon (defined as 231 in^3 at 60 °F [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.**~~

(a) All metered sales by the gallon using a meter with a maximum rated capacity greater than 20 gal/min, shall be accomplished by the use of a meter and device that automatically compensates for temperature.

(b) For equipment placed in service on or after January 1, 2023, all metered sales using a meter 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.

(c) Effective January 1, 2030, all metered sales shall be accomplished by use of a meter and device that automatically compensates for temperature.

(Added 1986 **Amended 20XX)**

Ms. Tina Butcher (NIST OWM) addressed questions that were stated within the reporting for this item. Ms. Butcher also provided an in-depth background and discussion on this item. It was noted that NIST OWM submitted modified language that was posted under the NCWM L&R supporting documents.

Some of the bullet points that were in the NIST analysis of this item were:

- The existing language references a value of "15.6 °C" for temperature determinations in metric units, according to the current industry practice for sales of petroleum products, the reference temperature for sales in metric are based on 15 °C rather than the exact conversion from 60 °F (which is 15.6 °C). Thus, the temperature reference in metric should be 15 °C.

- The current method of sale for LPG requires sales based on a specified reference temperature because of the significant effects of temperature on the volume of LPG. This helps ensure equity for buyer and seller; facilitate value comparisons among competing applications; and deter those who would take advantage of the effects of temperature on volume from using these effects to their advantage during sales under given temperature conditions.

- There is some concern that including effective dates as shown in the Item Under Consideration does have the effect of rescinding the original requirement for certain categories of sales. Additionally, specifying such dates may possibly lead to future extensions of these date or permanent exceptions. However, if this proposal will allow the community to progress toward more uniform implementation of temperature compensation in the commercial measurement of LPG, this approach may prove to be a valuable tool for accomplishing this goal and improve understanding and consistent application of the requirements, and we believe the submitter is to be commended for striving to achieve this clarity and uniformity in application.

- The second clause of the current Item Under Consideration addresses equipment put into service as of January 1, 2023. The generic reference to "equipment placed into service" implies that only newly installed equipment with flow rates of 20 gpm or less needs to include automatic temperature compensation capabilities. This could be misconstrued as negating the first clause in the proposal. We believe the intent of the submitter was to simply expand the requirement for "automatic" temperature compensation capability for metering systems above 20 gpm to include those systems below this flow rate point. Thus, a recommended alternative is included in the suggested changes.

Formatting Changes:

- By formatting the language into sub-sections, it makes the method of sale requirement easier to follow and apply and facilitates consideration of the Item Under Consideration.

- For the next released edition of Handbook 130, NIST OWM will be reformatting the references to "Notes" and their associated page numbers and replacing these with notes formatted as "Section ##. Note."

Mr. Scott Simmons (CO) lead a discussion regarding some of the issues that his state has faced regarding LPG sales. Mr. Simmons and many other regulators expressed support for this Item. It was expressed that many were unaware of the NIST modified proposal. L&R Committee Chair, Mr. John McGuire (NJ), encourage membership to review the NIST proposal. During the Committee work session both the original item under consideration and the NIST modifications were discussed. A Committee member was concerned that industry may be unaware of this item on the agenda. A Committee member was concerned that industry may be unaware of this item on the agenda. Several Committee members had industry contacts that they would contact. The Committee heard comments that in support for the NIST proposal. The Committee was appreciative that NIST had reformatted the structure to make the language easier to read. The Committee recommends this move forward as a Voting item.

Regional Association Comments:

WWMA 2019 Annual Meeting: The Committee heard comments in support of addressing the underlying issue that resulted in this proposal. Mr. Scott Simmons (CO) recommended an alternative proposal for consideration to require automatic temperature compensation (ATC) for all LPG meters.

1. A non-retroactive date for all new equipment to have ATC.

2. A retroactive date for all equipment to have an ATC retrofit or replacement.

Mr. Clark Cooney (CA) commented that LPG has a very high thermal coefficient of expansion, therefore all LPG meters should be temperature compensated.

The Committee believes this item under consideration is fully developed and recommends it as a Vote.

During the voting session, several comments were received that designation of this item as Voting provides an incorrect impression that the WWMA supports the item as written, without consideration of additional options for the sale of propane using meters that temperature compensate. The submitter stated that while the item itself does not require further development; an alternate option will be developed to account for the comments received at the WWMA conference to be presented to other regional meetings. The WWMA L&R Committee agreed to change the status of the item from Voting to Developing.

SWMA 2019 Annual Meeting: The SWMA considered the two proposals that were submitted by Ms. Michelle Wilson (AZ) on September 30, 2019. The Committee took into consideration proposal number two.

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 131] of vapor (defined as 1 ft^3 at 60 °F [15.6 °C]), or the gallon (defined as 231 in^3 at 60 °F [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.**~~

(a) All metered sales by the gallon using a meter with a maximum rated capacity greater than 20 gal/min, shall be accomplished by use of a meter and device that automatically compensates for temperature.

(b) For equipment placed in service on or after January 1, 2023, all metered sales using a meter 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.

(c) Effective January 1, 2030, all metered sales shall be accomplished by use of a meter and device that automatically compensates for temperature.

North Carolina would like to have this item be withdrawn because they have a statue that addresses this item, and they will continue with flat sales. The Committee does like the proposal that is presented but believes there are too many variables in the method of sale and enforcement of this by the states. They would like consideration what to do with

the sale of portable cylinders. The Committee is recommending this as a Developing item to address the states' concerns.

NEWMA 2019 Interim Meeting: The Chairman reviewed the information provided from the previous two regional meetings. Mr. Richard Sutter (Richard Suiter Consulting) commented that the proposal, as written, could be problematic as it pertains to all sizes of devices. The Committee recommends the item stay with the developer for further work and vetting through the regions.

2020 Fall Regional Meetings of the WWMA, NEWMA, and SWMA: These regions adhered to a condensed agenda due to the Covid pandemic and did not consider this item.

CWMA 2020 Interim Meeting: Mr. Charlie Stutesman (KS) commented that if this requires a temperature compensation meter, Handbook 44 exempts meters with a capacity of 20 gallons per minute or less and wonders if that would create an inconsistency between Handbooks 44 and 130. Ms. Lisa Warfield (NIST OWM) commented that the submitter asked that this item move forward through the regions for consideration. Ms. Warfield further stated NIST believes the language in the two handbooks does not conflict. Mr. Loren Minnich (KS) commented that Handbook 44, Section S.2.8. does not conflict. Mr. Stutesman asked for clarification regarding whether this would force meters without temperature compensation to require them to be installed. Ms. Warfield further commented that the reason this item was developed is to provide consistency for the method of sale. Mr. Ivan Hankins (IA) commented that he also wonders if there is a conflict between the handbooks. Mr. Stutesman lastly commented that he believes that Handbook 130 indicates that states shall require temperature compensation, and Handbook 44 indicates that states may have but are not required to have temperature compensation meters, and whether this should be a jurisdictional issue depending on which handbooks are adopted in states. Ms. Warfield reminded members to review the background information on this issue. Mr. Stephen Peter (WI) asked how if this item is adopted, there should be lead time – possibly 2030 – to allow time for compliance. The Committee discussed the implementation date should be five years from the date of adoption. The Committee requests that the NCWM S&T Committee to consider the implications of passing this item as it relates to requiring temperature compensation on all meters. The Committee believes that the item is fully vetted in terms of its technical content and therefore recommends it become a Voting item.

During the Committee's work session, Ms. Warfield indicated that metric terms are not included in the language and suggests that they be included as highlighted below.

> **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 (kilogram) pound, (cubic meter) metered cubic foot [***NOTE 7***, page 132] of vapor (defined as 1 ft^3 at 60 °F [15.6 °C]), or the (liter) gallon (defined as 231 in^3 at 60 °F [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**~~.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.com/publication-16 to review these documents.

FLR - UNIFORM FUELS AND AUTOMOTIVE LUBRICANTS REGULATION

FLR-20.5 V Section 2.1.2.(a). Gasoline-Ethanol Blends.

(This item appeared as part of Block 4 as FLR-20.2 within NCWM Publication15 (2020) Interim Agenda. Part of the original "Item Under Consideration" was not moved forward as a Voting item and now appears in Block 4 of this Agenda.)

Source:
American Petroleum Institute (API)

Purpose:
More comprehensively align Handbook 130, Uniform Fuels and Automotive Lubricants Regulations, with the U.S. EPA's rule that grants a 1-psi vapor pressure waiver to E15 for summertime (June 1 to September 15) and to help ensure consumers receive a consistent E15 blend. The proposed changes to HB 130 reflect the important information that an inspector will need to ensure that E15 is properly blended and that the potential harm to the consumer and the environment will be minimized.

Item Under Consideration:
Amend Handbook 130, Uniform Fuels and Automotive Lubricants Regulation as follows:

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.

(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 2009) (Amended 2018)

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 latest edition of ASTM D4814, "Standard Specification for Automotive Spark-Ignition Engine Fuel," limits by more than 1.0 psi for blends **containing at least 9 and not more than 15 volume percent ethanol** from June 1 through September 15 as allowed by EPA per 40 CFR 80.27(d).

(Amended 2016**,** ~~**and**~~ 2018,2019 **and 20XX**)

NOTE 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)

Background/Discussion:
Aligning Handbook 130 with the important parts of the U.S. EPA rule that grants a 1-psi vapor pressure waiver during the summer months for E15 is important to ensure that E15 has the correct vapor pressure during these months and provides comprehensive information to aid in ensuring compliant E15 gasoline is provided to consumers. FLR Sections 2.1.2. and 1.23. are modified to address these issues.

Amendments to FLR paragraph 2.1.2.(a), specify that the range of ethanol in the gasoline-ethanol blends qualifying for the 1-psi waiver shall only be from 9 to 15 volume percent as per 40 CFR 80.27(d). The change is unambiguous and does not require the inspector to access the federal rule to understand the applicable range of the waiver.

EPA Final rule, "Modifications to Fuel Regulations To Provide Flexibility for E15; Modifications to RFS RIN Market Regulations" June 10, 2019, www.govinfo.gov/content/pkg/FR-2019-06-10/pdf/2019-11653.pdf

U.S. EPA "Modifications to Fuel Regulations to Provide Flexibility for E15; Modifications to RFS RIN Market Regulations: Response to Comments." June 10, 2019. Added in total with an example provided below.

www.regulations.gov/document?D=EPA-HQ-OAR-2018-0775-1174

p. 53 (Response to comments) E15 is allowed to be blended at blender pumps as long **as only certified components** are used (sic) Cases where blender pumps introduce uncertified components into gasoline continue to be illegal and may result in fuel that exceeds gasoline quality standards. Parties that blend uncertified components into previously certified gasoline are considered fuel manufacturers under the regulations at 40 CFR part 79 and refiners under 40 CFR part 80. [emphasis added]

The following quotes from the U.S. EPA proposal provide additional information:

- EPA provided the following comments in its final rule on the recent E15 1-psi waiver related to Section G, 2.1.2. and 1.23.:
    - "[U.S. EPA] note that for E15 produced at blender pumps using E85 made with natural gas liquids, **use of the deemed to comply provision to demonstrate compliance would not be available.** This is because the RVP of natural gas liquids can be as high as 15.0 psi and even a small amount of natural gas liquids could cause the gasoline portion of the blend to not comply with the applicable RVP limitations established under CAA sec. 211(h), which is required under CAA sec. 211(h)(4)(A) to be deemed in compliance. Parties that make E15 at a blender pump using **E85 made with previously certified gasoline can take advantage of the 'deemed to comply' provision** and associated affirmative defense at 40 CFR 80.28 if all applicable requirements in 80.28 are met." (84 FR 27008)
    - (emphasis added)

- "As discussed in the [U.S. EPA] proposal, E15 made at blender pumps is often made with certified E10 (or CBOB) and E85 (made with denatured fuel ethanol and uncertified hydrocarbon blendstocks, i.e., natural gas liquids). While data is limited, we believe that approximately 50 percent of stations offering E15 make E15 in this manner. (84 FR 27010)

- **40 CFR 80.27(d)** *Special provisions for alcohol blends.*

(1) Any gasoline which meets the requirements of paragraph (d)(2) of this section shall not be in violation of this section if its Reid vapor pressure does not exceed the applicable standard in paragraph (a) of this section by more than one pound per square inch (1.0 psi).

(2) In order to qualify for the special regulatory treatment specified in paragraph (d)(1) of this section, gasoline must contain denatured, anhydrous ethanol. **The concentration of the ethanol, excluding the required denaturing agent, must be at least 9% and no more than 15% (by volume) of the gasoline.** The ethanol content of the gasoline shall be determined by the use of one of the testing methodologies specified in § 80.47. The maximum ethanol content shall not exceed any applicable waiver conditions under section 211(f) of the Clean Air Act.

(3) **Each invoice, loading ticket, bill of lading, delivery ticket and other document which accompanies a shipment of gasoline containing ethanol shall contain a legible and conspicuous statement that the gasoline being shipped contains ethanol and the percentage concentration of ethanol.**

(emphasis added)

- **40 CFR 80.28(g)** *Defenses.*

(8) In addition to the defenses provided in paragraphs (g)(1) through (6) of this section, in any case in which an ethanol blender, distributor, reseller, carrier, retailer, or wholesale purchaser-consumer would be in violation under paragraph (b), (c), (d), (e), or (f) of this section, as a result of gasoline which contains between 9 and 15 percent ethanol (by volume) but exceeds the applicable standard by more than one pound per square inch (1.0 psi), the ethanol blender, distributor, reseller, carrier, retailer or wholesale purchaser-consumer **shall not be deemed in violation if such person can demonstrate, by showing**

receipt of a certification from the facility from which the gasoline was received or other evidence acceptable to the Administrator, that:

(i) The gasoline portion of the blend complies with the Reid vapor pressure limitations of § 80.27(a); and

(ii) The ethanol portion of the blend does not exceed 15 percent (by volume); and

(iii) No additional alcohol or other additive has been added to increase the Reid vapor pressure of the ethanol portion of the blend.

In the case of a violation alleged against an ethanol blender, distributor, reseller, or carrier, if the demonstration required by paragraphs (g)(8)(i), (ii), and (iii) of this section is made by a certification, it must be supported by evidence that the criteria in paragraphs (g)(8)(i), (ii), and (iii) of this section have been met, such as an oversight program conducted by or on behalf of the ethanol blender, distributor, reseller or carrier alleged to be in violation, which includes periodic sampling and testing of the gasoline or monitoring the volatility and ethanol content of the gasoline. Such certification shall be deemed sufficient evidence of compliance provided it is not contradicted by specific evidence, such as testing results, and provided that the party has no other reasonable basis to believe that the facts stated in the certification are inaccurate. **In the case of a violation alleged against a retail outlet** or wholesale purchaser-consumer facility, **such certification shall be deemed an adequate defense for the retailer** or wholesale purchaser-consumer, **provided that the retailer** or wholesale purchaser-consumer **is able to show certificates for all of the gasoline contained in the storage tank found in violation,** and, provided that the retailer or wholesale purchaser-consumer has no reasonable basis to believe that the facts stated in the certifications are inaccurate.

(emphasis added)

On January 17, 2020 Mr. Prentiss Searles (API) submitted modified language for Section 2.1.2.(a). Gasoline-Ethanol Blends. There were over ten letters received in opposition for MOS-20.2. Documentation for Dispenser Labeling Purposes and FLR 20.3. Section 1.23. Ethanol Flex Fuel language. Many were opposed due to its duplication with the EPA compliance program for this subject

NCWM 2020 Interim Meeting: Mr. Searles did provide a presentation and requested from the floor that Section 2.1.2.(a) Gasoline-Ethanol Blends be considered as a Voting Item and he volunteered to chair a workgroup to further develop the remaining items. Many rose in support and opposition of this block of items. It was addressed by Ms. Warfield (NIST OWM) that FALS was tasked by the Committee in July 2019 to review the EPA language and its impact on the regulations within the Fuels Regulations within Handbook 130. FALS Chair, Mr. Bill Striejewske (NV) remarked that he has created a focus group but needs additional clarification from the Committee on what specifically they should address.

During Committee work session they concurred that Section 2.1.2.(a). Gasoline-Ethanol Blends will proceed as a Voting item. All the remaining items will be merged into Block 4 and be assigned to FALS for further development.

NCWM 2020 Annual Meeting: Several comments were heard both in opposition and supporting the item from both industry and regulators. Those opposed included Mr. Mike Harrington (IA), Mr. Charlie Stutesman (KS), Mr. Jim Willis (NY), Mr. Doug Rathbun (IL), Mr. Chuck Corr (Corr Consulting), Mrs. Kristy Moore (Growth Energy), and Mr. Kevin Adlaf (ADM). Those opposed voiced concern over the newly implemented EPA streamlining rules. Questions were raised if the changes would affect this item or if the item is now necessary? Other concerns were heard that the language would be moving backwards, that having the percentages listed could cause issues in the future if the EPA changes them again. The current language is effective, and this type of work is done in a lab not the field where the requirements could easily be looked up. Those supporting the item included Mr. Searles (API), Mr. Joe Sorena (Chevron), Mr. Russ Lewis (Marathon Petroleum). The supporting comments included that this just adds back what was not included during the emergency amendment for the 2020 Handbook. Mr. Harington (OR) supporting as

a voting item or leave it on the agenda for another cycle. It was decided that further review was needed, and the item was downgraded to Informational status.

NCWM 2021 Interim Meeting: The Committee was informed that after a multiyear process the EPA Streamlining Rule was signed in late 2020. The rule has drawn considerable interest and discussion with various stakeholders. Many would like to wait for the streamlining rules and a review of the Handbook regulations. Some believe that language is specified in the CFR and the streamlining rule does not affect this. Some felt this item should be withdrawn it its entirety. A few comments were heard that were like those from annual meeting hearings in both support and opposition to of the item. A neutral comment was heard from Mr. Elliott (WA) challenging for theoretical examples showing the harm of having or not having the proposed language added back in. The Committee deemed this item to be fully developed and felt this should be voted on its own merit.

Regional Association Comments:

WWMA 2019 Annual Meeting: A presentation was provided by Mr. Joe Sorena (representing API). Mr. Steven Harrington (OR) recommended this be assigned to FALS for review and he concurs with the modification to 2.1.2.(a) in adding the language "containing at least 9 and not more than 15 volume percent ethanol." Mr. Kevin Adlaf (ADM) felt that the proposal provided too much information that was not necessary. Mr. Adlaf asked if there was any data to support this proposal. Ms. Cadence Matijevich (NV) remarked that Section 2.1.2.(b), the first sentence has grammar issues. Ms. Jacki Fee (Cargill) remarked that several items were left out of the language. Ms. Kristy Moore (Growth Energy) remarked that the item was addressed at the 2019 NCWM Annual Meeting and recommends this item be Withdrawn. The Committee is recommending this be Assigned to FALS for further review. It was noted that the formatting was not correct within the agenda and it should appear as:

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 latest version of ASTM D4814, "Standard Specification for Automotive Spark-Ignition Engine Fuel," limits by more than 1.0 psi for blends **containing at least 9 and not more than 15 volume percent ethanol** from June 1 through September 15 as allowed by EPA per 40 CFR 80.27(d).

(Amended 2016, 2018, ~~and~~ 2019**, and 20XX**)

(b) An ethanol blender, distributor, reseller, carrier, retailer, or wholesale purchaser-consumer who exceeds the applicable standard by more than 1.0 psi, shall demonstrate, by showing receipt of a certification from the facility from which the gasoline, gasoline-ethanol blend or ethanol flex fuel blend was received, that the hydrocarbon portion of the blend complies with the Reid vapor pressure and other limitations of 40 CFR 80.27(a), as required in 40 CFR 80.28(g)(8). The certification shall be supported by evidence that the above criteria have been met, such as an oversight program which includes periodic sampling and testing of the gasoline or monitoring the volatility and ethanol content of the gasoline.

(Added 20XX)

NOTE 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**, and 20XX**)

SWMA 2019 Annual Meeting: The Committee believed there could be misuse of Section 2.1.2(b). Once the sample is tested it could be in violation for being substandard. The responsible party would be the retailer. How does this responsibility change when they are showing a certification where the product is coming from and is the product in the tank? It would be difficult for the inspector for following the quality and oversight of that product. During work session, clarification was provided that if there is documentation that certified product is within the tank the retailer does not need to test for conformance. There must be a documentation and traceability of the certification. However,

if no certification then testing would need to be done to be verified. The Committee did not concur that with the language and the clarification that was provided. They believe that someone needs to be responsible even if certification is provided. There were too many questions concerning this issue and the Committee is requesting this be assigned to FALS for additional work and a recommendation to the NCWM L&R Committee.

NEWMA 2019 Interim Meeting: Mr. Bill Hornbach (representing Chevron and API) made a brief presentation as to the details of the proposal. Mr. Hornbach supports the item. Ms. Kristy Moore submitted written comments and believed the item should be Withdrawn. Ms. Jackie Fee (Cargill) opposes the item indicating that the word "certification" is misleading and recommends withdrawal of this item. The Committee recommended this item be assigned to FALS for further technical review and clarification.

2020 Regional Meetings of the WWMA, NEWMA, and SWMA: These regions adhered to a condensed agenda due to the Covid pandemic and did not consider this item.

CWMA 2019 Interim Meeting: Mr. Prentiss Searles (API) commented that this item adds back and updates the waiver limitations that were provided in the 2019 version of Handbook 130. The 2019 version specified the range of a gasoline-ethanol blend that was granted the 1-psi waiver as "containing 9 to 10 volume percent ethanol." In June 2019, the U.S. EPA extended the range to 15 volume percent ethanol and during last year's annual meeting (July 2019), a vote to adopt that modification was made and the applicable range of the waiver was lost. This proposal adds the range for the waiver of 9 to 15% ethanol back in the text. This proposed change realigns NIST Handbook 130 with the language that was there before, is unambiguous and provides necessary contextual information to the user of the Handbook. Having this information available is consistent with the labeling requirements in the NIST Handbook that refer to E15. Mr. Charlie Stutesman (KS) commented he prefers to leave the NIST Handbook 130 as it is with reference language rather than specifics. He believes the item is ready for voting status. Mr. Chuck Corr (Iowa Renewable Fuels Association) commented that if Handbook 130 is amended to include all the federal rules, it would become too lengthy to be useful for field inspectors. Ms. Beverly Michaels (BP) commented that she believes this reference is important to include in Handbook 130 and should be amended as presented by API. She believes a lack of specificity in the Handbook could be problematic and confusing for those in the field. Regardless of members' positions on the topic, the item has been fully vetted and is ready for voting status. Mr. Mike Harrington (Iowa) commented that he heard from many industry representatives and constituents that it would be best to leave the Handbook as a general reference to EPA language. He believes the item should be withdrawn.

The Committee discussed the question of publishing protocols passed recently by the membership that references other documents without specific numbers cited in Handbook 130. Another point that was made was that the industry is rapidly changing, and it is difficult to keep pace in the Handbook as changes happen in the referenced materials. Based on these points, the CWMA L&R Committee recommends this item be Withdrawn.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.com/publication-16 to review these documents.

FLR-21.1 W Section 4.4. Product Storage and Dispenser Identification

Source:
Delaware Weights and Measures

Purpose:
Make product lines distinguishable so Inspectors can identify defective equipment.

Item Under Consideration:
Amend Handbook 130, Uniform Fuels and Automotive Lubricants Regulation, as follows:

4.4. Product Storage and Dispenser 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 API color codes as specified and published in "API Recommended Practice 1637" shall be used.
(Amended 2018)

4.4.3. Dispenser Identification. – Inside the dispenser cabinet, the individual dispenser supply piping or the individual meters must be marked by either a label or by color (as defined in 4.4.2.) as to the grade of fuel that they provide.
(Added 20XX)

Previous Action:
- N/A

Original Justification:
With the development of new technologies, there is no way for an Inspector to differentiate which meter is suppling fuel to the discharge hose. In the past, a cog, a gear or totalizer would be visible, and you could identify which meter belonged to which grade of fuel. If the meter is leaking today, you must fail all grades because you cannot verify which grade is at issue. With pulsers and security covers to prevent access, you cannot see which meter is actually moving product. The easiest solution would be to spray paint a spot on the supply line with white for Regular, red for Premium, Yellow for Diesel, etc. This would also be beneficial when verifying which type of filter must be installed (10 micron for Unleaded or 30 micron for Diesel/Kerosene).

The submitter acknowledged that this would be added expense and extra step to installing a dispenser. It would also be costly for the retailer to have a service person come and make needed compliance repairs if they were unable to do it themselves. This could be non-retroactive to alleviate Retailers from incurring new expenses but would be more beneficial if it were retroactive.

The submitter requested Voting status for this item in 2021.

Arguments in Favor:

Regulatory:
- The submitter of the proposal Mr. Robert Huff (DE) informed the Committee that he was having issue with the new covers on the cabinet and he is unable to different the difference when he does not have access to the pump.

Industry:
- No comments from industry were in favor of this Item.

Advisory:
- No comments.

Arguments Against:

Regulatory:
- There were many regulators who spoke that they were not in support of this proposal.

Industry:
- There were three industry members that do not support this proposal.

Advisory:

- Ms. Lisa Warfield (NIST OWM) noted that at three of the fall regional meetings they requested this item be withdrawn and this information can be found in the background discussion.

Item Development:

NCWM 2021 Interim Meeting: The Committee reviewed the regional information and concurs that this is a best practice but not a weights and measures issue. They encourage the submitter to take some of the suggestions offered at the regional meetings develop a new proposal for consideration. The Committee withdrew this item, finding that it does not have enough merit.

Regional Association Comments:

WWMA 2020 Annual Meeting: A regulator from the State of New Mexico found the proposal helpful from a weights and measures and environmental field inspector's point of view. The Committee heard concerns from industry and regulators regarding the costs to retrofit dispensers, changing colors on secondhand dispensers, challenges with ready access to the API document, the challenge of one dispenser providing a myriad of grades and blending fuels, and questioning if the problem the proposal intends to address is pervasive enough to make a regulation. Testimony was given regarding logistical challenges of implementing a standardized color code, the possible cost of implementation, and whether this was something that should be codified in regulation.

The WWMA L&R Committee recommends this item be Withdrawn. The Committee felt while well intentioned, this item is better suited as a best practice**.**

SWMA 2020 Annual Meeting: The L&R Committee received comments from several regulators in favor of the proposed item and believed it had merit but needed more development. Many commented that feedback was needed from industry and other regulators. Tennessee and North Carolina already adopt Section 4.4.2. Declaration of Meaning of Color Code of the Uniform Fuels and Automotive Lubricants Regulation. Mr. Prentiss Searles (API) commented that there would be many challenges in implementation. Mr. Searles agreed with the intent of the proposal but felt it would be more fitting as a best practice instead of rule. Mr. Searles also mentioned that the color code standard (API Recommended Practice 1637, Using the API Color-Symbol System to Identify Equipment, Vehicles, and Transfer Points for Petroleum Fuels and Related Products at Dispensing and Storage Facilities and Distribution Terminals") has been updated and is available online (www.apiwebstore.org). The latest version can also be reviewed in the API "reading room" at this www.api.org/products-and-services/standards/rights-and-usage-policy#tab-ibr-reading-room. An account will need to be created, which is free, and then go to the "IBR Documents Under Construction" section to read it. Ms. Kristy Moore (Growth Energy) commented that RP 1637 did not have input by ethanol industry, and they have their own industry standard. Ms. Rebecca Richardson (National Biodiesel Board) while in support of the proposal she expressed concerns about the use of only colors to identify for those who may be color challenged. Mr. Searles noted the updated standard uses a combination of letters and colors.

The Committee recommends this item to be Withdrawn. The Committee does not believe this item has merit as a weights and measures issue but may be an industry best practice.

NEWMA 2020 Interim Meeting: Mr. Mike Sikula (NY) asked how inspectors will confirm if the required labeling is correct? Mr. Brent Price (Gilbarco) is not in support of this item because he does not feel it is a weights and measures issue. Mr. Ethan Bogren (Westchester Co., NY) feels it would be useful for field inspectors to have confirmation as to which meter is for which product. Mr. Bogren believes the item has merit but recommends that the labeling be required on the meter rather than the piping. Mr. Jason Flint (NJ) seconds that product labeling on the meter would be helpful. The Committee wants to know what type of labeling would be used. Color coding, octane value, product identification. Mr. Bogren suggested that meter labels use same terminology as the product identification on the dispenser face. The Committee would like to see the developer revise language to require labeling on meters rather than piping. Additionally, the developer should provide standardized terms for meter labeling for different products. The Committee recommends this item as a Developing item for further development by the submitter.

2020 Regional Meetings of the WWMA, NEWMA, and SWMA: These regions adhered to a condensed agenda due to the Covid pandemic and did not consider this item.

CWMA 2020 Interim Meeting: Mr. Charlie Stutesman (KS) recommends this item be withdrawn. While regulators inspect the inside of a cabinet, identifying supply lines neither impedes nor helps with inspections. He believes this is unnecessary. The term "non-retroactive" does not appear anywhere else in Handbook 130 but instead uses an implementation date. Mr. Prentiss Searles (API) commented that he believes this item would be difficult to implement especially at the manufacturing level and should be withdrawn. Mr. Searles suggested this item might be more appropriate as a best practice. Mr. John Albert (MO) commented that he concurs the item should be Withdrawn. Ms. Kristy Moore (Growth Energy) commented that API RP1637 did not include many ethanol blends for decades, and she does not believe regulations should be implemented that require a purchase of a resource. She agrees that the item should not move forward at this time without consideration that API RP1637 did not include ethanol blends for a long time. Mr. Doug Rathbun (IL) recommends the item be withdrawn. Mr. Searles commented that the API RP 1637 is available for anyone to review online through the API reading room. Based on the discussions heard during open hearings and during the work session, the Committee recommends this item be Withdrawn.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.com/publication-16 to review these documents.

ITEM BLOCK 3 (B3) METHOD OF SALE, SECTION 2.33. OIL. FUELS AND AUTOMOTIVE REGS. SECTIONS 2.14. ENGINE (MOTOR) OIL, 3.13. OIL, AND 7.2. REPRODUCIBILITY LIMITS

These items were designated as a "Voting" items by the Committee at the 2020 NCWM Interim Meeting. Based upon comments received at the 2020 NCWM Annual Meeting, the L&R Committee deemed these items not to be fully developed and changed the status to Informational. At the 2021 NCWM Interim Meeting the Committee modified the Item under Consideration and recommended this as a Voting item at the 2021 NCWM Annual Meeting.

B3: MOS-18.1 V Section 2.33. Oil
B3: FLR-18.1 V Sections 2.14. Engine (Motor) Oil, 3.13. Oil and 7.2. Reproducibility Limits.

B3: MOS-18.1 V Section 2.33. Oil

Item Under Consideration:
Amend 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. –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,**~~ **W**henever ~~**the**~~ **any** vehicle engine (motor) oil in ~~**the**~~ **a** container**, receptacle, dispenser, storage tank,** 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")~~**.**~~**,**" **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 the front or forward facing-label of such 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 the plainly visible, cautionary statement set forth in the latest version of SAE J183, Appendix A. Whenever any vehicle engine (motor) oil is declared obsolete by a vehicle or engine manufacturer, the front or forward-facing label of such 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 the plainly visible, cautionary statement required by the vehicle or engine manufacturer.** ~~**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 **and 20XX**)

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. **In lieu of such display requirements, the documentation defined in Section 2.33.1.5. Documentation shall be readily available for inspection.**

(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, **grade as defined by SAE J300 "Engine Oil Viscosity Classification,"** 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~~ **the** plainly visible cautionary statement**s** 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 **and 20XX**)

(Added 2012) (Amended 2013**,** ~~**and**~~ 2014 **and 20XX**)

B3: FLR-18.1 V Sections 2.14. Engine (Motor) Oil, 3.13. Oil and 7.2. Reproducibility Limits.

Item Under Consideration:
Amend Handbook 130, Uniform Fuels and Automotive Lubricants Regulation as follows:

Section 2. Standard Specification

2.14. Engine (Motor) Oil. – Shall not be sold or distributed for use unless the product conforms to the following specifications:

(a) performance claims **made regarding active performance categories, as** 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) performance claims made regarding any obsolete performance categories, as listed on the label, shall be determined to meet the requirements of Section 3.13.1.3.2. "Inactive or Obsolete Service Categories" by displaying the appropriate cautionary labeling and

(c) 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 **and 20XX**)

Section 3. Classification, Identification, and Labeling for Sale

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,**~~ **W**henever ~~**the**~~ **any** vehicle engine (motor) oil in ~~**the**~~ **a** container **receptacle, dispenser, storage tank** 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")~~**.**~~," **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 the front or forward-facing label ~~If a~~ of such** 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 the plainly visible cautionary statement set forth in the latest version of SAE J183, Appendix A. Whenever any vehicle engine (motor) oil is declared obsolete by a vehicle or engine manufacturer, the front of forward-facing label of such 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 the plainly visible cautionary statement required by the vehicle or engine manufacturer.**

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

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. **In lieu of such display requirements the documentation defined in Section 3.13.1.5. Documentation shall be readily available for inspection.**

(Added 2012) (Amend 2013**,** ~~**and**~~ 2014 **and 20XX**)

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, **grade as defined by the latest version of SAE J300 "Engine Oil Viscosity Classification";** 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)

Section 7. Test Methods and Reproducibility Limits

7.2. Reproducibility Limits.

7.2.1. AKI Limits. – When determining the antiknock index 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.**~~ **With the exception of the low-temperature cranking viscosity, all values required to define SAE Viscosity Grades, as defined in the latest version of SAE J300, "Engine Oil Viscosity Classification", are critical specifications as defined by the latest version of ASTM D3244, "Standard Practice for Utilization of Test Data to Determine Conformance with Specifications".**

(Added 2008**) (Amended 20XX)**

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 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) (Amended 2018)

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.

NCWM 2018 Interim Meeting: Mr. Bill Striejewske (FALS Chair), indicated that FALS is recommending this as a Voting item. In addition, support was heard from ILMA, API, and several regulators recommending this item as a Voting item. However, many commenters stated that editorial and minor changes were still needed for the item to be fully developed. Mr. Tim Elliot (WA) recommended that this item have streamlined language to use a generic warning statement. Suggestions were also provided on the ultimate placement of the label. Due to lack of consensus, potentially non-editorial changes, and lack of specific details on proposed changes, the L&R Committee recommends this item be "Assigned" to FALS for further development to address the issues mentioned in this write-up.

NCWM 2018 Annual Meeting: Mr. Striejewske remarked that FALS received modified language from the submitter and FALS is recommending this item remain Assigned with the updated.

NCWM 2019 Interim Meeting: Comments were heard from members of FALS stating that the level of discussion desired was not had regarding this item due to the absence of the submitter at the FALS meeting that was held Sunday, January 13, 2019. There were several comments regarding the term "modern" not being defined in the cautionary statements. Several stakeholders and regulators feel these items need further review and clarification. A Kansas regulator stated that the caution statement is incorrect and should be modified because it is oil being sold, not an engine. After consideration, the Committee recommends this item remain Assigned to FALS.

NCWM 2019 Annual Meeting: Mr. Striejewske (FALS Chair) commented that the submitter has a revision (May 10, 2019) under the L&R supporting documents. This is the language that the Committee has moved forward for consideration.

NCWM 2020 Interim Meeting: Prior to the meeting, the submitter provided an updated proposal dated January 18, 2020. During the open hearings, several members voiced their support for the block as amended by FALS and for it to move forward as a Voting Item: Mr. Kevin Schnepp (CA), Mr. Jeff Harmening (API), Ms. Joanna Johnson (AOCA), Mr. Kurt Floren (Los Angeles Co., CA). Mr. Matthew Levetown (ILMA, representing submitter) supported the changes made by FALS but with two edits; "Automotive motor oil" not "Automotive lubricants" and the inclusion of a comma after "as applicable to purchaser".

There was concern from a member that NCWM Publication 15 did not provide the latest language for this Block and that modifications are being sent in at the last minute. This has occurred for several items and this situation needs to be addressed. One solution maybe for the submitter to provide printed copies. Ms. Lisa Warfield (NIST OWM) stated she understands the frustration, but updated proposals can all be found on the NCWM website listed as supporting documents.

The Committee moved this item forward as a Voting item with minor editorial changes.

NCWM 2020 Annual Meeting: This Item Block had included Item FLL-18.1. The Committee separated out FLL-18.1 from the block and moved that Item to a Vote. The Committee heard suggested revisions to MOS-18.1 and FLR-18.1. Changes to modify these two items are presented in API Revision (Concept 1- Revisions to MOS 18-1, Section

2.33.1.3.2. Inactive and Obsolete Service Categories and FLR-18.1., Section 3.13.1.3.2. Inactive or Obsolete Service Categories).

The Committee lowered the status of the item and returned it to the Committee for further discussion at the 2021 Interim Meeting.

NCWM 2020 Annual Meeting: Due to the 2020 Covid-19 pandemic, this meeting was adjourned to January 2021, at which time it was held as a virtual meeting. Due to constraint of time, only those items designated as 2020 Voting Items were addressed. All other items were addressed in the subsequent 2021 NCWM Interim Meeting.

NCWM 2021 Interim Meeting: After hearing comments in support of the API revision, the Committee made the decision to change the Item Under Consideration to incorporate the API recommendations. The Committee heard from Several State regulators Mr. Stutesman (KS), Mr. Kevin Schnepp (CA), Mr. Steven Harrington (OR), Mr. Doug Rathbun (IL), Mr. Jim Willis (NY), and industry representatives Mr. Jeffrey Leiter (ILMA) and Mr. Jeffrey Harmening (API). The testimony supported the item, but there was concern by most who testified that the new language had not been properly vetted by all the regions and more time is needed for vetting before voting. The Committee modified the language using the API revision and recommended this as a Voting item.

The API (Concept 1) appears in the Item Under Consideration. The two Sections that were modified had appeared on the Interim Agenda as:

B3: MOS-18.1

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,**~~ **W**henever ~~**the**~~ **any** vehicle engine (motor) oil in ~~**the**~~ **a** container**, receptacle, dispenser, storage tank,** 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")~~.~~**:**" **the front or forward facing-label of such 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 the plainly visible, cautionary statement set forth in the latest version of SAE J183, Appendix A. Whenever any vehicle engine (motor) oil is declared obsolete by a vehicle or engine manufacturer, the front or forward-facing label of such 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 the plainly-visible, cautionary statement required by the vehicle or engine manufacturer.** ~~**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 **and 20XX**)

B3: MOS-18.1 appeared in the 2021 Interim Agenda as:

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,**~~ **W**henever ~~**the**~~ **any** vehicle engine (motor) oil in ~~**the**~~ **a** container **receptacle, dispenser, storage tank** 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")~~.~~**:**" **the front or forward-facing label** ~~**If a**~~ **of such** 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 the plainly visible cautionary statement**

set forth in the latest version of SAE J183, Appendix A. Whenever any vehicle engine (motor) oil is declared obsolete by a vehicle or engine manufacturer, the front of forward-facing label of such 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 the plainly visible cautionary statement required by the vehicle or engine manufacturer.

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

Regional Association Comments:

WWMA 2019 Annual Meeting: The Committee noted that within both regulations Section 2.33.1.3.2. and 3.13.1.3.2. the term "statement" needs to be inserted after the word "cautionary." With the inclusion of this word the FALS Chair and API believed that B3: MOS-18.1 and B3 FLR-18.1 are fully developed. The Committee is recommending this block be provided a Voting status.

The modified language in each paragraph is shown below in response to a request during the voting session:

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,**~~ **W**henever ~~**the**~~ **any** vehicle engine (motor) oil in ~~**the**~~ **a** container**, receptacle, dispenser, storage tank,** 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")~~**.**~~**:**" **the front or forward facing-label of such 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 the plainly visible, cautionary statement set forth in the latest version of SAE J183, Appendix A. Whenever any vehicle engine (motor) oil is declared obsolete by a vehicle or engine manufacturer, the front or forward-facing label of such 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 the plainly visible, cautionary statement required by the vehicle or engine manufacturer.** ~~**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 **and 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,**~~ **W**henever ~~**the**~~ **any** vehicle engine (motor) oil in ~~**the**~~ **a** container **receptacle, dispenser, storage tank** 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")~~**.**~~**:**" **the front or forward-facing label** ~~**If a**~~ **of such** 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 the plainly visible cautionary statement set forth in the latest version of SAE J183, Appendix A. Whenever any vehicle engine (motor) oil is declared obsolete by a vehicle or engine manufacturer, the front of forward-facing label of such 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 the plainly visible cautionary statement required by the vehicle or engine manufacturer.**

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

FLL-18.1. Engine Fuels & Automotive Lubricants Inspection Law, Section 8.6 Prohibited Acts

It was noted within background information in the report that the submitter did not address the concern with Section 8.6. as to why the term "specified" is being stricken. In addition, the sentence is not complete and the Committee questions "what is the meaning of the sentence, it appears to place the burden on the purchaser?" The Committee recognizes this is a preexisting regulation but would like it addressed by FALS.

Based on comments and uncertainty of FLL-18.1 we recommend that the submitter continue to work with FALS to develop this item.

SWMA 2019 Annual Meeting: In previous reports Section 2.14 had been included. The Committee reached out to Mr. Jeff Leiter (ILMA) confirmed that in error this Section is still under consideration and needs to be added into the reporting.

2.14. Engine (Motor) Oil. – Shall not be sold or distributed for use unless the product conforms to the following specifications:

(a) performance claims **made regarding active performance categories, as** 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;

(b) performance claims made regarding any obsolete performance categories, as listed on the label, shall be determined to meet the requirements of Section 3.13.1.3.2. "Inactive or Obsolete Service Categories" by displaying the appropriate cautionary labeling and

(c) 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 **and 20XX**)

The word "statement" should be added after the term "cautionary" throughout the proposal.

The Committee is recommending this remain at FALS and the concerns be addressed.

NEWMA 2019 Interim Meeting: Mr. Jeff Leiter (ILMA) commented that this proposal follows language that was recently adopted in California that addresses non-compatible or "obsolete" oils in the marketplace. This effort is intended to address current litigation being considered in multiple states. Ultimately, this current language is a product of further work with regulators as well as additional language which was inadvertently left out of the regional agenda proposals. The Committee recommends the item is ready for voting as amended.

2020 Regional Meetings of the WWMA, NEWMA, and SWMA: These regions adhered to a condensed agenda due to the Covid pandemic and did not consider this item.

CWMA 2020 Interim Meeting: Mr. Jeffrey Harmening (API) commented that his organization supports the modifications in general but has a recommendation that Sections 2.33.1.3.2. and 3.13.1.3.2. Inactive or Obsolete Service Categories (both sections) be revised to include the list of organizations and specifications listed in 2.33.1.3. and 3.13.1.3. Engine Service Category (both sections) to minimize the potential for improper use in engines.

Mr. Charlie Stutesman (KS) commented that he agrees that the NCWM L&R Committee consider this be downgraded so that API's concept can be fully vetted. He believes it makes a great deal of difference whether the new language references only the API service category or other organizations and specifications.

Another concept received from Mr. Jeff Leiter, ILMA (the original submitter) is to reinstate the last sentence of the section: *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.* The Committee considered these changes and had a very comprehensive discussion regarding 1) which proposal would best address the concerns of the industry, and 2) if the concept of either proposal had been vetted enough to allow the item to move forward with voting status. The Committee opted to provide both concepts to the NCWM L&R Committee to further vet both proposals. Consequently, the CWMA L&R Committee opts to not make a specific recommendation.

API Revision (Concept 1):

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,**~~ **W**henever ~~**the**~~ **any** vehicle engine (motor) oil in ~~**the**~~ **a** container**, receptacle, dispenser, storage tank,** 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")~~**.**~~**," 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., the front or forward facing-label of such 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 the plainly-visible, cautionary statement set forth in the latest version of SAE J183, Appendix A. Whenever any vehicle engine (motor) oil is declared obsolete by a vehicle or engine manufacturer, the front or forward-facing label of such 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 the plainly-visible, cautionary statement required by the vehicle or engine manufacturer.** ~~**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 **and 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,**~~ **W**henever ~~**the**~~ **any** vehicle engine (motor) oil in ~~**the**~~ **a** container **receptacle, dispenser, storage tank** 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")**.," 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.,**" **the front or forward-facing label** ~~**If a**~~ **of such** 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 the plainly-visible cautionary statement set forth in the latest version of SAE J183, Appendix A. Whenever any vehicle engine (motor) oil is declared obsolete by a vehicle or engine manufacturer, the front of forward-facing label of such 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 the plainly-visible cautionary statement required by the vehicle or engine manufacturer.**
(Added 2012) (Amended 2014 **and 20XX**)

ILMA Revision (Concept 2):

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,**~~ **W**henever ~~**the**~~ **any** vehicle engine (motor) oil in ~~**the**~~ **a** container**, receptacle, dispenser, storage tank,** 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")~~.~~**," the front or forward facing-label of such 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 the plainly-visible, cautionary statement set forth in the latest version of SAE J183, Appendix A. Whenever any vehicle engine (motor) oil is declared obsolete by a vehicle or engine manufacturer, the front or forward-facing label of such 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 the plainly-visible, cautionary statement required by the vehicle or engine manufacturer.** ~~**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. (**~~**Reinstate the last sentence).**
(Amended 2014 **and 20XX**)

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.com/publication-16 to review these documents.

ITEM BLOCK 4 (B4) METHOD OF SALE REGULATION, SECTION 2.20.2. DOCUMENTATION FOR DISPENSER LABELING PURPOSES. FUELS AND AUTOMOTIVE LUBRICANTS REGULATION, SECTION 1.23. ETHANOL FLEX FUEL, 2.1.2.(B) GASOLINE-ETHANOL BLENDS, AND SECTION 3.2.5. DOCUMENTATION FOR DISPENSER LABELING PURPOSES

B4: MOS-20.2	W	Section 2.20.2. Documentation for Dispenser Labeling Purposes
B4: FLR-20.3	W	Section 1.23. Ethanol Flex Fuel
B4: FLR-20.6	W	Section 2.1.2.(b) Gasoline-Ethanol Blends
B4: FLR-20.7	W	Section 3.2.5. Documentation for Dispenser Labeling Purposes

(B4: FLR-20.6, Section 2.1.2.(b) Gasoline-Ethanol Blends and B4: FLR-20.7, Section 3.2.5. Documentation for Dispenser Labeling Purposes appeared in the 2020 NCWM Publication 15 under FLR-20.2. These two sections were removed from that "item under consideration" and merged into this block as it proceeds through the conference.)

Source:
Fuels and Lubricants Subcommittee (original submitter API)

Purpose:
More comprehensively align Handbook 130, Uniform Fuels and Automotive Lubricants Regulations, with the U.S. EPA's rule that grants a 1-psi vapor pressure waiver to E15 for summertime (June 1 to September 15) and to help ensure consumers receive a consistent E15 blend. The proposed changes reflect the regulatory changes finalized by the EPA that revise product transfer document (PTD) requirement for disclosure of the percentage concentration of ethanol in gasoline-ethanol blends, as revised in 40 CFR 80.

B4: MOS-20.2 W Section 2.20.2. Documentation for Dispenser Labeling Purposes.

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

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 **as described below**. (Added 2014, **Amended 20XX**)

(1) Per 40 CFR 80.1503, For gasoline containing less than 9 volume percent ethanol, the following statement: "EX - Contains up to X% ethanol. The RVP does not exceed [fill in appropriate value] psi." The term X refers to the maximum volume percent ethanol present in the gasoline.

(2) Per 40 CFR 80.1503, For gasoline containing 9 or more volume percent ethanol, a conspicuous statement that the gasoline being shipped contains ethanol and the percentage concentration of ethanol as described in 40 CFR 80.27(d)(3).

(3) To meet the requirements of 40 CFR 80.28(g)(8), for ethanol flex fuel intended for blending with gasoline or gasoline-ethanol blends, to make gasoline containing not more than 15 volume percent ethanol, the following statement: "EXX contains XX% ethanol." The term XX refers to the volume percent ethanol present.

(Added 20XX)

(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**, and 20XX**)

B4: FLR-20.3 W Section 1.23. Ethanol Flex Fuel

Item Under Consideration:
Amend Handbook 130, Uniform Fuels and Automotive Lubricants Regulation as follows:

1.23. Ethanol Flex Fuel. – Blends of ethanol and hydrocarbons restricted for use as fuel in ground vehicles equipped with flexible-fuel spark-ignition engines. **Ethanol Flex Fuel intended for blending with gasoline and gasoline ethanol blends shall contain certified components e.g., blending of ethanol flex fuel containing natural gas liquids is prohibited unless certified consistent with 40 CFR 80.28(g)(8) requirements.**

Amended 2014 **and 20XX**)

B4: FLR-20.6 W Section 2.1.2.(b). Gasoline-Ethanol 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.

(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 2009) (Amended 2018)

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 latest edition of ASTM D4814, "Standard Specification for Automotive Spark-Ignition Engine Fuel," limits by more than 1.0 psi for blends from June 1 through September 15 as allowed by EPA per 40 CFR 80.27(d).

(b) An ethanol blender, distributor, reseller, carrier, retailer or wholesale purchaser-consumer who exceeds the applicable standard by more than 1.0 psi, shall demonstrate, by showing receipt of a certification from the facility from which the gasoline, gasoline-ethanol blend or ethanol flex fuel blend was received, that the hydrocarbon portion of the blend complies with the Reid vapor pressure and other limitations of 40 CFR 80.27(a), as required in 40 CFR 80.28(g)(8). The certification shall be supported by evidence that the above criteria have been met, such as an oversight program which includes periodic sampling and testing of the gasoline or monitoring the volatility and ethanol content of the gasoline.

(Added 20XX)

(Amended 2016**, ~~and~~** 2018,2019 **and 20XX**)

NOTE 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)

B4: FLR-20.7 W Section 3.2.5. Documentation for Dispenser Labeling Purposes

3.2.5. Documentation for Dispenser Labeling Purposes. – For automotive gasoline, automotive gasoline oxygenate blends**, ethanol flex fuel for blending** or racing gasoline, 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 **as described below**.

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

(1) Per 40 CFR 80.1503, For gasoline containing less than 9 volume percent ethanol, the following statement: "EX - Contains up to X% ethanol. The RVP does not exceed [fill in appropriate value] psi." The term X refers to the maximum volume percent ethanol present in the gasoline.

(2) Per 40 CFR 80.1503, For gasoline containing 9 or more volume percent ethanol, a conspicuous statement that the gasoline being shipped contains ethanol and the percentage concentration of ethanol as described in 40 CFR 80.27(d)(3).

(3) To meet the requirements of 40 CFR 80.28(g)(8), for ethanol flex fuel intended for blending with gasoline or gasoline-ethanol blends, to make gasoline containing not more than 15 volume percent ethanol, the following statement: "EXX contains XX% ethanol." The term XX refers to the volume percent ethanol present.

(Added 20XX)

(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 oxygenate content of at least 1.0 % by volume 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 0.3 % by volume methanol shall be identified as "with" or "containing" methanol.

(Added 2014) (Amended 2018)

(Amended 1996, 2014, ~~and~~ 2018 **and 20XX**)

Background/Discussion:
This item has been assigned to the Fuels and Lubricants Subcommittee for further development. For more information or to provide comment, please contact the subcommittee chair:

Mr. Bill Striejewske, FALS Chair
Nevada Department of Agriculture, Bureau of Petroleum Technology
775-353-3792, wstriejewske@agri.state.nv.us

Aligning Handbook 130 with the important parts of the U.S. EPA rule that grants a 1-psi vapor pressure waiver during the summer months for E15 is important to ensure that E15 has the correct vapor pressure during these months and provides comprehensive information to aid in ensuring compliant E15 gasoline is provided to consumers.

Amend MOS Section 2.20.2.(a)(1) and (2) (there is a "mirrored change" intended for FLR Section 3.2.5.) to address the regulatory changes finalized by the U.S. EPA that revise product transfer document (PTD) requirements for disclosure of the percent concentration of ethanol in gasoline-ethanol blends, as revised in 40 CFR 80.1503.

Amend MOS Section 2.20.2(a)(3) (there is a "mirrored change" intended for FLR Section 3.2.5.). This revision is necessary to reflect the regulatory requirements within 40 CFR 80.28(g)(8) which are newly applicable to E15 since it has been granted the 1.0 psi waiver. The proposed amendment is needed to address the fact that ethanol flex fuel (EFF), which may be used to produce gasoline-oxygenate blends, can have a significant difference in ethanol content depending on season and geography. EFF can range from 51 to 83 volume percent ethanol. A retail gasoline location receiving EFF that will be used for the purpose of producing gasoline-oxygenate blends needs the correct ethanol content information of the EFF. This information is needed in order to adjust the blend ratio to ensure that the fuel is properly blended to meet the requirements that E15 contain at least 10 and not more than 15 volume percent ethanol per 40 CFR 80.1504(e)(3) and to demonstrate the certification requirements within 40 CFR 80.28(g)(8). Accurate blending of E15 from EFF ensures appropriate dispenser labeling which facilitates customer value comparison and provides consumer misfuelling protection. The following bullets from the November 2017 presentation by the Wisconsin Department of Agriculture Trade and Consumer Protection provide additional explanation for why this information is needed.

Selling E15 (slide 24 and 25, www.wpmca.org/assets/ethanol/E15_What_Retailers_Need_to_Know.pdf)

- Blending at the pump can be done using E85 or other high blend ethanol product
- E85, or flex fuel, is a term that refers to high-level ethanol-gasoline blends containing 51%-83% ethanol, depending on geography and season
- Because of the range in possible ethanol content of E85, retailers must ensure the blend ratio on all dispensers are set to properly blend for E15 at all times
- There are two ways to ensure proper blend ratio:
    - Program the dispensers for the maximum ethanol content of the E85/Flex Fuel

- Have a service company adjust the blend ratios every time the ethanol content in the E85/Flex Fuel changes
  - This requires regular monitoring of the ethanol content of the E85/Flex Fuel you are receiving and prompt action when the ethanol content changes
- If a consumer experiences vehicle damage as a result of fuel being dispensed at a higher ethanol content than what is posted on the dispenser, the retailer is responsible.

Some may argue that the proposed changes are not "new" requirements. However, as demonstrated above these changes are necessary to address the U.S. EPA's new approach to granting the 1-psi RVP waiver for E15 in the summertime.

Amend FLR Section 1.23. to reflect the modification are needed to address the fact that ethanol flex fuel intended for blending with gasoline and gasoline ethanol blends must contain certified components or each storage tank must be certified before it can be sold as a blendstock for E15. For example, blending of ethanol flex fuel containing natural gas liquids is prohibited unless certified consistent with 40 CFR 80.28(g)(8) requirements.

Amendments to FLR Section 2.1.2.(b) address the new U.S. EPA approach for E15. For parties in the fuel distribution system, U.S. EPA has reinterpreted the 1-psi allowance for RVP maximum limits in the gasoline distribution system for up to 15% ethanol blends. Parties in the fuel distribution system utilize the "deemed to comply" provision in the U.S. EPA regulations to certify that the fuel sold complies with federal regulations. The Clean Air Act Section 211(h) extends that allowance **only** if parties in the distribution system are deemed to comply, that is, they have evidence that: (1) the hydrocarbon portion meets the RVP limits, (2) the ethanol portion meets its waiver condition and (3) no additional alcohol or other additive has been added to increase the RVP of the ethanol portion of the blend. Specifically, the proposed changes to HB 130 reflect the U.S. EPA language that requires parties in the distribution system seeking to utilize the "deemed to comply" provision to qualify for the 1-psi waiver for ethanol blends from 9 to 15 volume percent, must demonstrate that the gasoline-ethanol blend or hydrocarbon portion of an ethanol flex fuel blend meets RVP requirements per 40 CFR 80.28. Without this language in HB 130, inspectors will not have the full information needed to regulate the fuel and they may not recognize that E15 produced at the pump by blending ethanol flex fuel made with natural gas liquids (NGL) with gasoline-ethanol blends may not qualify for the 1-psi waiver and will likely violate state and federal vapor pressure requirements. Specifically, the EPA final rule indicates that, "…, in order for these fuels to be introduced into commerce, they must be substantially similar to certification fuel or obtain a waiver from the substantially similar requirement." Further, information that describes the challenges of using NGLs is provided in the list of attachments, Section 20. below).

Some may argue that the proposed changes are not "new" requirements. However, as demonstrated above, the proposed changes to HB 130 are necessary to address the U.S. EPA's new approach to granting the 1-psi RVP waiver for E15 in the summertime (e.g., 40CFR80.28(g)(8) and (g)(8)(ii) now cover E15 where it previously addressed E10). The EPA has also indicated that the change in rules will result in more manufacturing of E15 at the retail pump and that there will be increased availability and use of the fuel. Consequently, it is appropriate for NCWM to make changes that comprehensively reflect the requirements associated with the manufacturing of E15.

EPA Final rule, "Modifications to Fuel Regulations To Provide Flexibility for E15; Modifications to RFS RIN Market Regulations" June 10, 2019, www.govinfo.gov/content/pkg/FR-2019-06-10/pdf/2019-11653.pdf.

U.S. EPA "Modifications to Fuel Regulations to Provide Flexibility for E15; Modifications to RFS RIN Market Regulations: Response to Comments." June 10, 2019. Added in total with an example provided below: www.regulations.gov/document?D=EPA-HQ-OAR-2018-0775-1174

> p. 53 (Response to comments) E15 is allowed to be blended at blender pumps as long **as only certified components** are used (sic) Cases where blender pumps introduce uncertified components into gasoline continue to be illegal and may result in fuel that exceeds gasoline quality standards. Parties that blend uncertified components into previously certified gasoline are considered fuel manufacturers under the regulations at 40 CFR part 79 and refiners under 40 CFR part 80. (emphasis added)

The following quotes from the U.S. EPA proposal provide additional information:

- **40 CFR 80.27(d)** *Special provisions for alcohol blends.*

(1) Any gasoline which meets the requirements of paragraph (d)(2) of this section shall not be in violation of this section if its Reid vapor pressure does not exceed the applicable standard in paragraph (a) of this section by more than one pound per square inch (1.0 psi).

(2) In order to qualify for the special regulatory treatment specified in paragraph (d)(1) of this section, gasoline must contain denatured, anhydrous ethanol. **The concentration of the ethanol, excluding the required denaturing agent, must be at least 9% and no more than 15% (by volume) of the gasoline.** The ethanol content of the gasoline shall be determined by the use of one of the testing methodologies specified in § 80.47. The maximum ethanol content shall not exceed any applicable waiver conditions under section 211(f) of the Clean Air Act.

(3) Each invoice, loading ticket, bill of lading, delivery ticket and other document which accompanies a shipment of gasoline containing ethanol shall contain a legible and conspicuous statement that the gasoline being shipped contains ethanol and the percentage concentration of ethanol.

(emphasis added)

- **40 CFR 80.28(g**) *Defenses.*

(8) In addition to the defenses provided in paragraphs (g)(1) through (6) of this section, in any case in which an ethanol blender, distributor, reseller, carrier, retailer, or wholesale purchaser-consumer would be in violation under paragraph (b), (c), (d), (e), or (f) of this section, as a result of gasoline which contains between 9 and 15 percent ethanol (by volume) but exceeds the applicable standard by more than one pound per square inch (1.0 psi), the ethanol blender, distributor, reseller, carrier, retailer or wholesale purchaser-consumer **shall not be deemed in violation if such person can demonstrate, by showing receipt of a certification from the facility from which the gasoline was received or other evidence acceptable to the Administrator,** that:

(i) The gasoline portion of the blend complies with the Reid vapor pressure limitations of § 80.27(a); and

(ii) The ethanol portion of the blend does not exceed 15 percent (by volume); and

(iii) No additional alcohol or other additive has been added to increase the Reid vapor pressure of the ethanol portion of the blend.

In the case of a violation alleged against an ethanol blender, distributor, reseller, or carrier, if the demonstration required by paragraphs (g)(8)(i), (ii), and (iii) of this section is made by a certification, it must be supported by evidence that the criteria in paragraphs (g)(8)(i), (ii), and (iii) of this section have been met, such as an oversight program conducted by or on behalf of the ethanol blender, distributor, reseller or carrier alleged to be in violation, which includes periodic sampling and testing of the gasoline or monitoring the volatility and ethanol content of the gasoline. Such certification shall be deemed sufficient evidence of compliance provided it is not contradicted by specific evidence, such as testing results, and provided that the party has no other reasonable basis to believe that the facts stated in the certification are inaccurate. **In the case of a violation alleged against a retail outlet** or wholesale purchaser-consumer facility, **such certification shall be deemed an adequate defense for the retailer** or wholesale purchaser-consumer, **provided that the retailer** or wholesale purchaser-consumer **is able to show certificates for all of the gasoline contained in the storage tank found in violation**, and, provided that the retailer or wholesale purchaser-consumer has no reasonable basis to believe that the facts stated in the certifications are inaccurate.

(emphasis added)

- **40 CFR 80.1503** *What are the product transfer document requirements for gasoline-ethanol blends, gasolines, and conventional blendstocks for oxygenate blending subject to this subpart?*

(a) Product transfer documentation for conventional blendstock for oxygenate blending, or gasoline transferred upstream of an ethanol blending facility.

(1) In addition to any other product transfer document requirements under 40 CFR part 80, on each occasion after October 31, 2011, when any person transfers custody or title to any conventional blendstock for oxygenate blending which could become conventional gasoline solely upon the addition of ethanol, or gasoline upstream of an oxygenate blending facility, as defined in § 80.2(ll), the transferor shall provide to the transferee product transfer documents which include the following information:

(i) The name and address of the transferor;

(ii) The name and address of the transferee;

(iii) The volume of conventional blendstock for oxygenate blending or gasoline being transferred;

(iv) The location of the conventional blendstock for oxygenate blending or gasoline at the time of the transfer;

(v) The date of the transfer;

(vi) For gasoline during the regulatory control periods defined in § 80.27(a)(2)(ii) or any SIP approved or promulgated under §§ 110 or 172 of the Clean Air Act:

(A) The maximum RVP, as determined by a method permitted under § 80.46(c), stated in the following format: "The RVP of this gasoline does not exceed [fill in appropriate value]"; and

(B) The conspicuous statement that the gasoline being shipped contains ethanol and the percentage concentration of ethanol as described in § 80.27(d)(3).

(2) The requirements in paragraph (a)(1) of this section do not apply to reformulated gasoline blendstock for oxygenate blending, as defined in § 80.2(kk), which is subject to the product transfer document requirements of §§ 80.69 and 80.77.

(3) Except for transfers to truck carriers, retailers, or wholesale purchaser-consumers, product codes may be used to convey the information required under paragraph (a)(1) of this section if such codes are clearly understood by each transferee.

(b) Product transfer documentation for gasoline transferred downstream of an oxygenate blending facility.

(1) In addition to any other product transfer document requirements under 40 CFR part 80, on each occasion after October 31, 2011, when any person transfers custody or title to any gasoline-ethanol blend downstream of an oxygenate blending facility, as defined in § 80.2(ll), except for transfers to the ultimate consumer, the transferor shall provide to the transferee product transfer documents which include the following information:

(i) The name and address of the transferor;

(ii) The name and address of the transferee;

(iii) The volume of gasoline being transferred;

(iv) The location of the gasoline at the time of the transfer;

(v) The date of the transfer; and

(vi) One of the statements detailed in paragraph (b)(1)(vi)(A) though (E) which accurately describes the gasoline-ethanol blend. The information regarding the ethanol content of the fuel is required year-round. The information regarding the RVP of the fuel is only required for gasoline during the regulatory control periods.

(A) For gasoline containing no ethanol (E0), the following statement; "E0: Contains no ethanol. The RVP does not exceed [fill in appropriate value] psi."

(B)(1) **For gasoline containing less than 9 volume percent ethanol, the following statement: "EX - Contains up to X% ethanol.** The RVP does not exceed [fill in appropriate value] psi." **The term X refers to the maximum volume percent ethanol present in the gasoline.**

(2) **The conspicuous statement that the gasoline being shipped contains ethanol and the percentage concentration of ethanol as described in § 80.27(d)(3**) may be used in lieu of the statement required under paragraph (b)(1)(vi)(B)(1) of this section.

(2) Except for transfers to truck carriers, retailers, or wholesale purchaser-consumers, product codes may be used to convey the information required under paragraph (b)(1) of this section if such codes are clearly understood by each transferee.

(c) The records required by this section must be kept by the transferor and transferee for five (5) years from the date they were created or received by each party in the distribution system.

(d) On request by EPA, the records required by this section must be made available to the Administrator or the Administrator's authorized representative. For records that are electronically generated or maintained, the equipment or software necessary to read the records shall be made available, or, if requested by EPA, electronic records shall be converted to paper documents.

[76 FR 44443, July 25, 2011, as amended at 79 FR 42167, July 18, 2014; 84 FR 27025, June 10, 2019]

(emphasis added)

On January 17, 2020, Mr. Prentiss Searles (API) submitted modified language for Section 2.1.2.(a). Gasoline-Ethanol Blends. There were over ten letters received in opposition for MOS-20.2 Documentation for Dispenser Labeling Purposes and FLR 20.3. Section 1.23. Ethanol Flex Fuel language. Many were opposed due to its duplication with the EPA compliance program for this subject

NCWM 2020 Interim Meeting: Mr. Searles did provide a presentation and requested from the floor that Section 2.1.2.(a) Gasoline -Ethanol Blends be considered as a Voting Item and he volunteered to chair a workgroup to further develop the remaining items. Many rose in support and opposition of this block of items. It was addressed by Ms. Warfield (NIST OWM) that FALS was tasked by the Committee in July 2019 to review the EPA language and its impact on the regulations within the Fuels Regulations within Handbook 130. FALS Chair Mr. Striejewske remarked that he has created a focus group but needs additional clarification from the Committee on what specifically they should address.

During Committee work session they concurred that Section 2.1.2.(a). Gasoline-Ethanol Blends will proceed as a Voting item. All the remaining items will be merged into Block 4 and be assigned to FALS for further development.

NCWM 2020 Annual Meeting: Due to the 2020 Covid-19 pandemic, this meeting was adjourned to January 2021, at which time it was held as a virtual meeting. Due to constraint of time, only those items designated as 2020 Voting Items were addressed. All other items were addressed in the subsequent 2021 NCWM Interim Meeting.

NCWM 2021 Interim Meeting: Mr. Prentiss Searles (API, submitter) requested that this item be withdrawn of it is not given an Assigned status to be further developed by FALS. Mr. Searles agreed to lead a task group to review the language and align with the EPA Streamlining regulations. Mr. Charlie Stutesman (KS) requested that this item be withdrawn considering the EPA Streamlining regulations.

Regional Association Comments:

WWMA 2019 Annual Meeting: There was a presentation provided by Mr. Joe Sorena (representing API). Mr. Kevin Adlaf (ADM) remarked that the CFR covers this information and state regulators would start enforcing EPA requirements. Is there any data showing that this is needed? Ms. Jacki Fee (Cargill) also concurred that this would be placing the EPA regulations within the States' hands, for this reason she is recommended this be Withdrawn. Mr. Steven Harrington (OR) indicated that it us useful to have the certain critical elements within the Handbook. He encourages further review and development. Ms. Rebecca Richardson (NBB) questioned whether this was being driven by a consumer issue and what is the premise for this proposal. It was mentioned that FALS was tasked with doing a review of Handbook 130 regulations and a review of the EPA rule. Ms. Kristy Moore (Growth Energy) stated that it is a complex proposal with significant scope. There are considerable references to product transfer documents (PTD) throughout the EPA rule and these only extracts one. Ms. Moore believed if you were extracting one then you should extract all. Ms. Moore believes that that current language is enough and recommends this item be withdrawn. Mr. Matt Sheehan (Chevron) stated the purpose of the modification was to provide information to retail sites and the EPA rules in the Clean Air Act are complicated. This is needed so retailers can understand the ethanol content in gasoline and consumers understand what they are purchasing. Ms. Michelle Wilson (AZ) remarked that they require PTDs to document the amount of ethanol and recommends this be assigned to FALS.

The Committee is recommending this as an Assigned item with an evaluation if the proposal is warranted and to address comments that were heard during open hearings. They would like FALS to provide a recommendation to NCWM L&R.

SWMA 2019 Annual Meeting: Mr. Russ Lewis (representing API) provided a presentation (on the NCWM L&R supporting documents). There was considerable discussion for the pros and cons of this proposal.

The Committee did not have enough fuels expertise but concurs that this is an important topic. They would like to see the product coming through the nozzle have the specifications that are posted. Consumers need to know what they are getting. They are not sure how it will affect the regulators role in implementing this regulation. The Committee would like this item to be sent to FALS where the subject matter experts (SME's) can provide their technical expertise.

NEWMA 2019 Interim Meeting: Mr. Bill Hornbach (representing Chevron and API), provided a presentation regarding this item. L&R Chairman Mr. Lou Sakin (MA) read comments submitted from Ms. Kristy Moore during open hearings at WWMA Annual Meeting. Ms. Moore believes this item as it currently appears in Handbook 130 is enough, and the proposal should be withdrawn because it places unfair rules on ethanol and not on other fuels. Mr. Kevin Adlaf (ADM) commented that transfer documents are not new, and he believes that having these provisions in place will not guarantee the finished fuel will meet spec. Ms. Jackie Fee (Cargill) opposes the item and believes the proposal should be Withdrawn. Due to its technical complexity, the Committee believes the item should be assigned to FALS for further consideration.

2020 Regional Meetings of the WWMA, NEWMA, and SWMA: These regions adhered to a condensed agenda due to the Covid-19 pandemic and did not consider this item.

CWMA 2020 Interim Meeting: Mr. Charlie Stutesman (KS) commented that he believes this item should continue to develop through FALS. Ms. Kristy Moore (Growth Energy) believes this item should be withdrawn. Ms. Moore does not believe EPA regulations should appear in Handbook 130. The Committee recommends this item remain Assigned to FALS.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.com/publication-16 to review these documents.

ITEM BLOCK 6 (B6) TRANSMISSION FLUID

B6: MOS-21.1 A Section 2.36.2. Labeling and Identification of Transmission Fluid
B6: FLR-21.2 A Section 3.14.1. Labeling and Identification of Transmission Fluid

Source:
Missouri Department of Agriculture

Purpose:
Protect consumers by providing a cautionary statement of package labels of obsolete transmission fluids.

B6: MOS-21.1. A Section 2.36.2. Labeling and Identification of Transmission Fluid

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

2.36.2. Labeling and Identification of Transmission Fluid. – Transmission fluid shall be labeled or identified as described below.
(Added 2017)

2.36.2.1. 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.

(f) **Any obsolete equipment manufacturer specifications shall be clearly identified as "obsolete" and accompanied by the following cautionary statement on the principal display in accordance with the Uniform Packaging and Labeling Regulation, Section 8. Prominence and Placement: Consumer Packages and Section 9. Prominence and Placement: Non-Consumer Packages.**

Caution: Some of the specifications are no longer deemed active by the original equipment manufacturer. Significant harm to the transmission is possible when using in applications in which it is not intended. Always refer to your vehicle owner's manual for proper transmission fluids.

The above ~~warning~~ cautionary statement is not required if the fluid claims to meet current original equipment manufacturer's specifications and refers to thereby preceding specifications
(Added 20XX)

(Added 2017 **and Amended 20XX**)

B6: FLR-21.2. A Section 3.14.1. Labeling and Identification of Transmission Fluid

Item Under Consideration:
Amend Handbook 130, Uniform Fuels and Automotive Lubricants Regulation, as follows

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

(Added 2017)

3.14.1.1. 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 (e.g., 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.

(f) **Any obsolete equipment manufacturer specifications shall be clearly identified as "obsolete" and accompanied by the following cautionary statement on the principal display panel in accordance with the Uniform Packaging and Labeling Regulation, Section 8. Prominence and Placement: Consumer Packages and Section 9. Prominence and Placement: Non-Consumer Packages.**

Caution: Some of the specifications are no longer deemed active by the original equipment manufacturer. Significant harm to the transmission is possible when using in applications in which it is not intended. Always refer to your vehicle owner's manual for proper transmission fluids.

The above cautionary statement is not required if the fluid claims to meet current original equipment manufacturer's specifications and refers to thereby preceding specifications
(Added 20XX)

(Amended 2017 **and 20XX**)

Previous Action:
- N/A

Original Justification:
Cautionary statements regarding obsolete products are currently required for tractor hydraulic fluids and are under consideration for motor oil. A cautionary statement and its position on the product label are currently not required for

Transmission fluid in either the Method of Sale, or Fuels and Lubricants Regulations. This proposal will protect consumers by ensuring they are informed when purchasing transmission fluids.

The submitter acknowledged that there may be argument that there is not sufficient space on the front package label for a cautionary statement.

The submitter requested Voting status for this item in 2021.

Arguments in Favor:

Regulatory:

- Mr. Ron Hayes (MO) provided an overview to the Committee regarding the issue with obsolete fluids in the marketplace. Mr. Hayes also remarked that at the CWMA 2020 Meeting he with worked with Ms. Warfield (NIST OWM) to clarify the language in the first paragraph of (f).

Industry:

-

Advisory:

-

Arguments Against:

Regulatory:

-

Industry:

- Ms. Johanna Johnson has been working with industry regarding the terminology. This is important that everyone understands the terminology. Currently industry uses terminology but has different meanings.

Advisory:

- Ms. Warfield (NIST OWM) remarked that the language should be clear and conspicuous following the UPLR. It was unknown whether this product type include both consumer and non-consumer type packaging.

Item Development:

NCWM 2021 Interim Meeting: The Committee reviewed the following item for consideration in Pub 15 (2021):

(e) **Any obsolete equipment manufacturer specifications shall be clearly identified as "obsolete" and accompanied by the following warning on the principle display panel in clearly legible font size and color as stated in Uniform Packaging and Labeling Regulation 8.2.2.:**

Caution: Some of the specifications are no longer deemed active by the original equipment manufacturer. Significant harm to the Transmission is possible when using in applications in which it is not intended. Always refer to your vehicle owner's manual for proper transmission fluids.

The above warning is not required if the fluid claims to meet current original equipment manufacturer's specifications and refers to thereby preceding specifications

(Added 20XX)

Mr. Ron Hayes (MO) provided an overview to the Committee regarding the issue with obsolete fluids in the marketplace. Mr. Hayes also remarked that at the CWMA 2020 Meeting he with worked with Ms. Warfield (NIST OWM) to clarify the language in the first paragraph of (f). Ms. Warfield had noted that UPLR does not have specifications for color however, Section 8. does state it must be conspicuous. It was agreed by the Committee that

this language should be identical to the language that was just voted in at the 2020 NCWM Annual Meeting within Item Block 2. Tractor Hydraulic Fluid. Ms. Johanna Johnson (Johnson Policy Associates, Inc.) would like additional time to reach consensus with industry regarding to align terminology (e.g. obsolete, current, active). Ms. Johnson requested the Committee provide this with an informational status. FALS Chair Mr. Striejewski informed the Committee that Ms. Johnson provided a presentation that provides additional information and will request NCWM post this.

The Committee provided this a status of Assigned and would like FALS to further evaluate with recommendations that Ms. Johnson provides. The Committee would like FALS to review the language to see if this product includes consumer and non-consumer type packaging. Many spoke in support of how this item will be developed through FALS.

Regional Association Comments:

WWMA 2020 Annual Meeting: The Committee heard concerns from regulators about having an up-to-date reference table to implement and enforce this regulation for transmission fluids. Mr. Ron Hayes (MO, submitter) indicated he would work with Lubrizol to provide a table. The Committee heard concerns from regulators regarding the necessity of the language proposed in the third paragraph of subsection (f) in proposals MOS-21.1 and FLR 21.2; testimony indicated that this language is not needed and confusing. The Committee heard concerns from regulators regarding a definition for "obsolete.".

The WWMA L&R Committee recommends this as a Developing item. The Committee recommends that the third paragraph in subsection (f) be removed from both items (see suggested edit below), that a reference table be provided prior to the item being forwarded for a vote, and that the submitter include a clear definition of obsolete in the proposal.

(f) **Any obsolete equipment manufacturer specifications shall be clearly identified as "obsolete" and accompanied by the following warning on the principle display panel in clearly legible font size and color as stated in Uniform Packaging and Labeling Regulation 8.2.2.:**

Caution: Some of the specifications are no longer deemed active by the original equipment manufacturer. Significant harm to the Transmission is possible when using in applications in which it is not intended. Always refer to your vehicle owner's manual for proper transmission fluids.

~~**The above warning is not required if the fluid claims to meet current original equipment manufacturer's specifications and refers to thereby preceding specifications**~~**.**

SWMA 2020 Annual Meeting: Mr. Stephen Benjamin (NC) expressed his support of the item. The Committee had concerns over the definition of "obsolete" and the need for the third paragraph in Section 2.36.2.1(f). It was also noted that UPLR 8.2.2 does not address color. This section was amended by the Committee to read Section 8.1. General.

The SWMA L&R Committee recommends this as an Information item. The Committee recommends that the submitter provide a clear definition of obsolete, that the first paragraph of subsection (f) for both items be updated as suggested below and that the third paragraph of subsection (f) be removed from both items.

(**f**) **Any obsolete equipment manufacturer specifications shall be clearly identified as "obsolete" and accompanied by the following warning on the principle display panel in accordance with** ~~**clearly legible font size and color as stated in**~~ **Uniform Packaging and Labeling Regulation 8.1General.** ~~**8.2.2.**~~**:**

Caution: Some of the specifications are no longer deemed active by the original equipment manufacturer. Significant harm to the Transmission is possible when using in applications in which it is not intended. Always refer to your vehicle owner's manual for proper transmission fluids.

~~**The above warning is not required if the fluid claims to meet current original equipment manufacturer's specifications and refers to thereby preceding specifications**~~

~~**(Added 20XX)**~~

NEWMA 2020 Interim Meeting: At the 2020 NEWMA Interim Meeting, Mr. Mike Sikula (NY) asked if this language applied to all transmission fluid or only specific types. Mr. Sikula commented that he has concerns about getting regulators in a precarious position between the engine manufacturers and the fluid manufacturers. He believes this is already covered with motor oil in Handbook 130 and does not need further elaboration for transmission fluid. Mr. Sikula is concerned this could become an unmanageable trend for any engine liquids or even beyond. Mr. Ethan Bogren (Westchester Co., NY) questioned if there is an existing problem that is being addressed by this proposal. Ms. Lisa Warfield (NIST OWM) commented that this language was modeled after the tractor hydraulic fluid regulation. Mr. Lou Sakin (Hopkinton, MA) asked if this could veer into a deceptive-practices situation. Mr. John McGuire (NJ) recommended that paragraph f "and color" and the third paragraph under section "f" be stricken. Mr. John Gaccione (Westchester Co., NY) commented that he agrees with Mr. Sikula and believes there has never been a clear distinction between regulation and consumer protection. Mr. Gaccione believes there are ambiguous definitions, including the word "obsolete" and this should be further vetted as a Developing item. Mr. Gaccione believes clarification on the definition of the term obsolete is defined as, when it takes effect, and to explain when it is applicable. Mr. Warfield commented that she believes it is when the engine manufacturer determines it is obsolete. Mr. Sikula believes this item could put regulators in an awkward position. Mr. Jeffrey Leiter (ILMA) commented that ILMA is in the process of gathering information on this item to see if there is currently any concern in the marketplace is attempting to gather information from the industry. The Committee recommends this item be moved forward as a Developing item and asks the submitter to address the comments made during NEWMA open hearings.

CWMA 2020 Interim Meeting: Ms. Joanna Johnson (Automotive Oil Change Association [AOCA]) commented that this should remain a Developing item. There are several facets of this item that require further discussion. engine oil and transmission fluid terminology are not necessarily consistent. Automakers have no history using this type of language for transmission fluid and wants to work with other stakeholders to develop language for consumer protection as the submitter intended. Mr. Aaron Lowe (Auto Care Association) representing auto part chains, agrees with Ms. Johnson and supports the general idea but needs more study. An average age for cars on the road currently is twelve-years and additional study is needed to develop language. Mr. Jeff Harmening (API) concurs with the above-mentioned comments. Mr. Charlie Stutesman (KS) commented that this item has merit and should move forward as a developing item. Mr. Ron Hayes (MO, submitter) commented that this item is intended to give consumer guidance like other equipment fluids. Mr. Hayes intends to continue to work with industry on this item including developing a list of obsolete oils. Mr. Jeff Leiter (ILMA) submitted written comments that were reviewed by the Committee. Ms. Lisa Warfield (NIST OWM) asked if the submitter wishes the item to be developed through FALS. Mr. Hayes agrees that the item is developing and should be assigned to FALS for further review. Based on discussions during open hearings and the Committee work session, the Committee recommends the item be Assigned and be referred to FALS.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.com/publication-16 to review these documents.

ITEM BLOCK 7 (B7) TRACTOR HYDRAULIC FLUID

B7: MOS-21.2 V Section 2.39.2. Labeling and Identification of Tractor Hydraulic Fluid
B7: FLR-21.3 V Section 3.17.1. Labeling and Identification of Tractor Hydraulic Fluid

Source:
Missouri Department of Agriculture

Purpose:
To ensure that the obsolete labeling is required and not an option.

B7: MOS-21.2. V Section 2.39.2. Labeling and Identification of Tractor Hydraulic Fluid

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

2.39.2. Labeling and Identification of Tractor Hydraulic Fluid. – Tractor hydraulic fluids shall be labeled or identified as described below.

2.39.2.1. Container Labeling. – The label on a container of tractor hydraulic 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 tractor hydraulic fluid shall be labeled with the following:

…

(e) any obsolete equipment manufacturer specifications ~~**should**~~**shall** be clearly identified as "obsolete" and accompanied by the following cautionary statement on the principal display panel in accordance with the Uniform Packaging and Labeling Regulation, Section 8. Prominence and Placement: Consumer Packages and Section 9. Prominence and Placement: Non-Consumer Packages.

Caution: Some of the specifications are no longer deemed active by the original equipment manufacturer. Significant harm to the transmission, hydraulic system, seals, final drive or axles is possible when using this product in applications in which it is not intended.

The above cautionary statement is not required if the fluid claims to meet current original equipment manufacturer's specifications and refers to thereby preceding specifications; and

…

2.39.2.2. Identification on Documentation. – Tractor hydraulic 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:

…

(e) any obsolete equipment manufacturer specifications ~~**should**~~**shall** be clearly identified as "obsolete" and accompanied by the following cautionary statement on the documentation in a clear and conspicuous manner.

Caution: Some of the specifications are no longer deemed active by the original equipment manufacturer. Significant harm to the transmission, hydraulic system, seals, final drive or axles is possible when using in applications in which it is not intended.

The above cautionary statement is not required if the fluid claims to meet current original equipment manufacturer's specifications and refers to thereby preceding specifications; and

2.39.2.3. Identification on Service Provider Documentation. – Tractor hydraulic fluid installed from a bulk tank at time of service shall be identified on the customer invoice with the information listed below:

…

(e) any obsolete equipment manufacturer specifications ~~**should**~~**shall** be clearly identified as "obsolete" and accompanied by the following cautionary statement on the customer invoice in a clear and conspicuous manner.

Caution: Some of the specifications are no longer deemed active by the original equipment manufacturer. Significant harm to the transmission, hydraulic system, seals, final drive or axles is possible when using in applications in which it is not intended.

The above cautionary statement is not required if the fluid claims to meet current original equipment manufacturer's specifications and refers to thereby preceding specifications; and

B7: FLR-21.3. V Section 3.17.1. Labeling and Identification of Tractor Hydraulic Fluid

Item Under Consideration:
Amend Handbook 130, Uniform Fuels and Automotive Lubricants Regulation, as follows

3.17.1. Labeling and Identification of Tractor Hydraulic Fluid. – Tractor hydraulic fluid shall be labeled or identified as described below

3.17.1.1. Container Labeling – The label on a container of tractor hydraulic 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 tractor hydraulic fluid shall be labeled with the following:

…

(e) any obsolete equipment manufacturer specifications ~~**should**~~**shall** be clearly identified as "obsolete" and accompanied by the following cautionary statement on the principal display panel in accordance with the Uniform Packaging and Labeling Regulation, Section 8. Prominence and Placement: Consumer Packages and Section 9. Prominence and Placement: Non-Consumer Packages.

Caution: Some specifications are no longer deemed active by the original equipment manufacturer. Significant harm to the transmission, hydraulic system, seals, final drive or axles is possible when using in applications in which it was not intended.

The above cautionary statement is not required if the fluid claims to meet current original equipment manufacturer's specifications and refers to thereby preceding specifications; and

…

3.17.1.2. Identification on Documentation. – Tractor hydraulic 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:

…

(e) any obsolete equipment manufacturer standard ~~**should**~~**shall** be clearly identified as "obsolete" and accompanied by the following cautionary statement on the documentation in a clear and conspicuous manner.

Caution: Some of the specifications are no longer deemed active by the original equipment manufacturer. Significant harm to the transmission, hydraulic system, seals, final drive or axles is possible when using in applications in which it is not intended.

The above cautionary statement is not required if the fluid claims to meet current original equipment manufacturer's specifications and refers to thereby preceding specifications.an accurate statement of the quantity of the contents in terms of liquid measure; and

3.17.1.3. Identification on Service Provider Documentation. – Tractor hydraulic fluid installed from a bulk tank at time of service shall be identified on the customer invoice with the information listed below:

…

(e) any obsolete equipment manufacturer specifications ~~**should**~~**shall** be clearly identified as "obsolete" and accompanied by the following cautionary statement on the customer invoice in a clear and conspicuous manner.

Caution: Some of the specifications are no longer deemed active by the original equipment manufacturer. Significant harm to the transmission, hydraulic system, seals, final drive or axles is possible when using in applications in which it is not intended.

The above cautionary statement is not required if the fluid claims to meet current original equipment manufacturer's specifications and refers to thereby preceding specifications; and

Previous Action:

- N/A

Original Justification:

This is a proposal to change the permissive term "should" to "shall" in Handbook, Method of Sale Regs. Sections 2.39.2.1.(e), 2.39.2.2.(e), and 2.39.2.3.(e). The following Sections of the Fuels and Lubricants Regs are also being recommended for a change for the term "should" to "shall"; Sections 3.17.1.1.(e), 3.17.1.2.(e), and 3.17.1.3.(e).

The submitter requested voting status for this item in 2021.

Arguments in Favor:

Regulatory:

- Several regulators made comments to the affirmative to change the language from "should to "shall."

Industry:

- Representatives from API and ILMA agreed with the updated terminology of changing the permissive language from "should" to "shall."

Advisory:

- Technical advisors discussed the permissive term and its intent on the item.

Arguments Against:

Regulatory:

-

Industry:

-

Advisory:

-

Item Development:

NCWM 2021 Interim Meeting: The Committee noted that the term "should" is permissive, and the word "shall" should replace it. At the 2020 NCWM Annual Meeting language changes for these exact sections had been given a "positive vote." The language from the 2020 NCWM Annual has been incorporated into this Item Under Consideration. This item was not incorporated into the 2020 NCWM Annual language because the Committee felt

changing a permissive term should have additional vetting and due process. The Committee hearing positive comments changed the word "should" to "shall" and recommended this as a Voting item.

Regional Association Comments:

WWMA 2020 Annual Meeting: The Committee heard testimony from both industry and regulators in support of this item. The WWMA L&R Committee recommends that this item move forward as a Voting item. The Committee agreed that the language in the regulation be mandatory rather than permissive.

SWMA 2020 Annual Meeting: The L&R Committee recommends this as a Voting item. It is our hope that this will be resolved with carryover item Block 2 on the 2020 L&R NCWM Committee Agenda.

NEWMA 2020 Interim Meeting: At the 2020 NEWMA Interim Meeting, Ms. Lisa Warfield (NIST OWM) stated that these items may not be necessary if addressed in Voting items in Block 2 Tractor Hydraulic Fluid. These changes can be applied to MOS 20.1 and FLR 20.1. If adopted these items would not be needed. Mr. Jeffrey Leiter (ILMA) supports changing "should" to "shall". Mr. Mike Sikula (NY) has concerns that manufacturers are dictating the terms putting weights and measures officials in a position that compromises the equity role of weights and measures officials. Mr. John McGuire (NJ) recommends striking the word "color" in Section 2.39.2.1(e), Section 2.39.2.2(e), Section 2.39.2.3(e), and Section 3.17.1.1 as it does not comport with UPLR Section 8.2.2. The Committee recommends this block as Voting items with incorporated changes.

CWMA 2020 Interim Meeting: L&R Chairman Mr. Doug Musick (KS) commented that modified language changes for Block 2. Tractor Hydraulic Fluid includes these changes from "should" to "shall". Mr. Ron Hayes (MO) commented that this language change is important, and he wants this item to move forward in case the items in Block 2 for Tractor Hydraulic Fluid are not adopted. Mr. Jeff Harmening (API) commented that he supports this item moving forward as a voting item. Mr. Charlie Stutesman (KS) commented that he believes these changes are appropriate and supports this item moving forward as a voting item. Mr. Stutesman further stated that if these changes are included in Block 2: Tractor Hydraulic Fluid, he wants to ensure that this language change be a priority regardless if all of Block 2 passes or not. Ms. Lisa Warfield (NIST OWM) commented that the Block 2 item is on the NCWM Annual Meeting agenda and will be determined prior to this item's consideration. Mr. Hayes commented that this item should have voting status. Ms. Warfield commented that if Block 2 does not move forward in entirety, some changes in this item could still pass if the NCWM L&R Committee only moved forward the language they felt would be adopted. Based on the discussions held during open hearings and Committee work session, the recommendation for this item is to become a Voting item.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.com/publication-16 to review these documents.

NET – HANDBOOK 133

NET-16.1 W Section 3.X. Recognize the Use of Digital Density Meters

Source:
Missouri

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 Handbook 133 as follows:

3.X. Volumetric Test Procedure for Viscous and Non-Viscous Liquids by Portable Digital Density Meter

This test method is suitable for measuring the density of dairy products such as milk and half and half, petroleum products such as fuel and paint thinner, fruit drinks such as pulp-free juices, syrups, vegetable oils, as well as other viscous and non-viscous liquids.

This test method is not recommended for high pulp or carbonated products (soda, beer, etc.) and all products tested should be free of suspended gas, air, sediment, or substances not approved by the digital density meter manufacturer.

3.X.1. Test Equipment

- **A scale that meets the requirements in Chapter 2, Section 2.2. "Measurement Standards and Test Equipment."**

  Note: To verify that the scale has adequate resolution for use, it is first necessary to determine the density of the liquid; next verify that the scale division is no larger than MAV/6 for the package size under test. The smallest graduation on the scale must not exceed the weight value for MAV/6.

  Example:

  Assume the inspector is using a scale with 1 g (0.002 lb) increments to test packages labeled 1 L (33.8 fl oz) that have an MAV of 29 mL (1 fl oz). Also, assume the inspector finds that the weight of 1 L of the liquid is 943 g (2.078 lb).

  Density: 1 L = 943 g (2.078 lb)

  MAV: 29 mL (1 fl oz)

  Convert Density into mL and fl oz:

  943 g ÷ 1000 mL= 0.943 g/mL ***(2.07 8 lb ÷ 33.8 fl oz = 0.061 4 lb/fl oz)***

  Convert MAV from Volume (mL/fl oz) to Weight:

  29 mL × 0.943 g/mL = 27.347 g ***1 fl oz × 0.061 4 lb/fl oz = 0.064 lb)***

  MAV in Weight/6

  27.347 g ÷ 6 = 4.557 g ***0.064 ÷ 6 = 0.010 lb***

  In this example, the 1 g (0.002 lb) scale division is smaller than the MAV/6 value of 4.557 g (0.010 lb) so the scale is suitable for making a density determination.

- **Air pump, low pressure– an aquarium air pump (to dry out measuring cell)**
- **Syringe, glass or plastic with Luer fitting (5mL or larger) - Note: Plastic syringe should be free of any lubricating substances**
- **Stopwatch (optional)**
- **Distilled or deionized water**
- **Cleaning agents (See Table 3.X. Cleaning Agents)**
- **Waste container**

- **Barometer, or other device for obtaining the prevailing barometric pressure, with an accuracy of ±3.0 mmHg – Note: smart phones with a barometer application that uses the phone's pressure sensor, have a typical accuracy of ±0.2 mmHg *(comment: barometer may not be necessary)***

- **Thermometer for measuring air temperature with a tolerance of ±1°C (2°F)**

- **Portable digital density meter meeting a minimum requirement of:**

Measuring Range	
Density	**0 – 3 g/cm^3**
Temperature	**0 – 4 °C (32 – 104 °F)[a]**
Viscosity	
Accuracy[b]	
Density	**0.001 g/cm^3**
Temperature	**0.2 °C (0.4 °F)**
Repeatability s.d.	
Density	**0.0005 g/cm^3**
Temperature	**0.1 °C (0.1 °F)**
Sample Volume	**2 mL**
Sample Temperature	**max. 200 °C (212 °F)**
footnotes **[a] Filling at higher temperatures possible.** **[b] Viscosity < 100 mPa·s, density < g/cm^3**	

3.X.2. Test Procedure

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

2. **Bring the sample packages and their contents to ambient temperature ±5 °C (9 °F).**

   Note: For refrigerated samples such as milk and other dairy products, a specimen of the product may be taken and placed into a clean bottle or vial with a closure or a syringe to reach ambient temperature. If the product requires mixing for uniformity, mix it before opening in accordance with any instructions specified on the package label. Shaking liquids, such as flavored milk, often entraps air that will affect volume measurements, so use caution when testing these products. Often, less air is entrapped if the package is gently rolled to mix the contents.

3. **The instrument must at ambient temperature. Avoid causing condensation within the unit. Condensation could cause instrument malfunction and harm.**

4. **Validate the digital density meter per the manufacturer's calibration instructions. Instrument shall calibrate within allowable density range (±0.0005)**

5. **Ensure the digital density meter is clean prior to testing. Any residual liquid should be drained and the unit should be flushed with a small amount of the sample to be tested.**

6. **Follow the manufacturer's instructions to select the correct method, when using a meter with built in correction factors, and measure the density of the sample using the built-in pump or syringe. Fill sample gently. If gas or air bubbles are present drain sample and refill. Note: a syringe may be desirable to allow sample specimen to achieve ambient temperature prior to introduction of specimen into testing cell.**

7. **Once digital density meter has stabilized (maintained reading ±0.5°F for 10 seconds) record density and temperature as indicated on instrument.**

8. **Apply coefficient of expansion (Alpha) to correct to the reference temperature. See Table 3-X. Reference Temperatures of Liquids. If the Alpha correction is not known, then factor can be calculated using the below formula. Note: some digital density meters may be programmed to automatically apply this correction.**

   Calculating the Temperature Coefficient Alpha

   Temperature coefficient Alpha = $\left|\frac{\rho^1-\rho_2}{T^1-T_2}\right|$

   ρ_1 …. *density at temperature* T_1

   ρ_2 …. *density at temperature* T_2

   T_1 …. *temperature at initial measurement*

   T_2 …. *temperature at second measurement*

9. **Apply viscosity correction if viscosity > 85 centipoise at 21°C (70 °F) by adding the value in Table 3.X. Density Measurement to your density measurement.**

   Note: Some units may be programmed to automatically apply. See Table 3.X. Approximate Viscosities of Common Materials for viscosity.

10. **Calculate the Conventional Mass using the formula below (This value will be approximately 0.999) to correct density to apparent density. to correct density to apparent density of product at prevailing atmospheric pressure or for higher accuracy calculate apparent density by using the following formula (terms as defined in NIST Standard Operating Procedure SOP 2 "Recommended Standard Operating Procedure for Applying Air Buoyancy Corrections https://www.nist.gov/pml/weights-and-measures/laboratory-metrology/standard-operating-procedures**

3.2.3. Calculate the Conventional Mass[6] of S_c, CM_{Sc}.

$$CM_{Sc} = \frac{M_{S_c}\left(1 - \frac{\rho_n}{\rho_{Sc}}\right)}{\left(1 - \frac{\rho_n}{8.0}\right)}$$

11. **Drain the instrument and repeat Steps 6–10 on a second specimen of the same package for verification of first measurement.**

12. **Compare the two readings, they must agree within 0.0003 g/cc. Calculate the average density of the two specimens from the sample. If the difference of two readings is greater than 0.0003 g/cc, discard results and repeat testing of sample. Air or undissolved gas will cause erroneous measurement errors. User of the test method shall always visually inspect for undissolved gas in**

measurement tube for valid test. User must investigate the cause such as air, operator technique, instrument stability, etc. before repeating more than two tests.

13. **Repeat testing for second package of the lot.**

14. **Calculate the average of sample 1 and sample 2; the two results must agree within 0.0003 g/cc. If the difference between the densities of the two packages exceeds 0.0003 g/cc, use the volumetric procedure in Section 3.3. "Volumetric Test Procedure for Non-Viscous Liquids."**

15. **Convert the unit of the average density back to the unit of measure specified on the package label i.e. pounds/fluid ounce, etc.**

16. **The digital density meter must be stored clean. After final use of the day or extended period of time, the instrument should be drained and cleaned following the manufacturer's recommended cleaning procedures. Two cleaning agents should be used. The first cleaning liquid removes sample residue and the second cleaning liquid removes the first cleaning liquid. See Table 3.X. Cleaning Agents for examples of cleaning agents recommended by a particular digital density meter manufacturer.**

    NOTE: If the unit will be immediately used to measure another sample of similar composition the unit may be drained and flushed with new sample three times before next analysis.

17. **Connect digital density meter to a source of low pressure, such as an aquarium air pump, to dry the unit.**

1

2

Table X.X. Density Measurement

Calculate the density of air at the temperature of test

using the following equation:

d_{air}, g/mL = 0.001293[273.15/T][P/760]

where:

T = temperature, K, and

P = barometric pressure, torr.

°C	mmHg	d_{air}, g/mL
15.56	760	0.001223314

Table X.X. Approximate Viscosities of Common Materials

Material	Viscosity in Centipoise	Correction
Water	1 cps	
Milk	3 cps	
SAE 10 Motor Oil	85–140 cps	0.0003
SAE 20 Motor Oil	140–420 cps	0.0006
SAE 30 Motor Oil	420–650 cps	0.0007

SAE 40 Motor Oil	**650–900 cps**	**0.0007**
Castrol Oil	**1,000 cps**	**0.0008**
Karo Syrup	**5,000 cps**	**0.0008**
Honey	**10,000 cps**	**0.00085**
Chocolate	**25,000 cps**	**0.0009**
Ketchup	**50,000 cps**	**0.0009**
Mustard	**70,000 cps**	**0.0009**
Sour Cream	**100,000 cps**	**0.0009**
Peanut Butter	**250,000 cps**	

Anton Paar DMA 35 Instrument Manual page 54

***Do not introduce ethanol or other alcohols into instrument without first flushing all milk products from instruments.**

3.X.3. Evaluation of Results

Follow the procedures in Section 2.3.7. "Evaluate for Compliance" to determine lot conformance.

Table X.X. Cleaning Agents

Commodity	Cleaning Liquid 1	Cleaning Liquid 2
Petroleum products	**Toluene, petroleum naptha, petroleum ether, n-nonane, cyclohexane**	**Ethanol**
Battery acid	**Tap water**	**Ultra-pre (bi-distilled or deionized) water**
Liquid soap & detergent, shampoo	**Tap water**	**Ultra-pre (bi-distilled or deionized) water**
Salad dressing, mayonnaise	**Petroleum naptha, dish washing agent in water**	**Ethanol**
Suntan lotion	**Tap water**	**Ethanol**
Spirits	**Tap water**	**Ultra-pre (bi-distilled or deionized) water**
Grape juice, syrup	**Warm tap water**	**Ultra-pre (bi-distilled or deionized) water**
Milk*	**Tap water, enzymatic lab cleaner**	**Ultra-pre (bi-distilled or deionized) water**

Package Checking Calculation Worksheet - Density Meter Method

		Package No.				
Product	**10W-30 Oil**	**8/28/2019**	**Run 1**	**Run 2**	**Run 3**	**Run 4**
Barometer	**air temp, °C**		**20**	**20**	**20**	**20**
	barometric press, mmHg		**760**	**760**	**600**	**760**
Density	**ρsubstance (g/cc)**		**0.8500**	**0.8501**	**0.8500**	**0.8501**
Meter	**temperature substance**	**tproduct, °C**	**21**	**20.5**	**20**	**19.5**
Table	**coefficient of expansion**	**alpha**	**0.000830**	**0.000830**	**0.000830**	**0.000830**
	reference temperature	**treference, °C**	**15.56**	**15.56**	**15.56**	**15.56**
Table	**Viscosity Correction**	**g/cc**	**0.0003**	**0.0003**	**0.0003**	**0.0003**
Scale	**total weight**	**pounds**	**7.113**	**7.113**	**7.120**	**7.120**
Weight	**tare**	**pounds**	**0.000**	**0.000**	**0.000**	**0.000**
	net weight	**pounds**	**7.113**	**7.113**	**7.120**	**7.120**
	Apparent Density		**0.8531**	**0.8528**	**0.8526**	**0.8521**
	Test Package Content	**Gallons**	**0.999**	**0.999**	**1.001**	**1.001**
		over/short(+/-)	**-0.001**	**-0.001**	**0.001**	**0.001**
	calculated from above net wt	**fluid ounces**	**127.9**	**127.9**	**128.1**	**128.2**
		over/short(+/-)	**-0.1**	**-0.1**	**0.1**	**0.2**
		ml	**3782**	**3783**	**3788**	**3790**
		over/short(+/-)	**-3**	**-2**	**3**	**5**
		liter	**3.782**	**3.783**	**3.788**	**3.790**
		over/short(+/-)	**-0.003**	**-0.002**	**0.003**	**0.005**
	Density of air		**0.0012**	**0.0012**	**0.0010**	**0.0012**
	density reference temp		**0.8541**	**0.8539**	**0.8534**	**0.8532**
	Apparent Density		**0.8531**	**0.8528**	**0.8526**	**0.8521**
	App Mass, lb (gal @ ref T)	**lb/gal**	**7.119144**	**7.117038**	**7.115147**	**7.111149**
	lb X factor	**gal/lb**	**0.140466**	**0.140508**	**0.140545**	**0.140624**
		floz/lb	**17.980**	**17.985**	**17.990**	**18.000**

Background/Discussion:

This item has been assigned to the submitter for further development. For more information or to provide comment, please contact:

Mr. Ronald Hayes*
Missouri Department of Agriculture
573-751-4316, ron.hayes@mda.mo.gov
**As of 2021, Mr. Hayes has retired from the Missouri Department of Agriculture*

The submitter provided proposed test procedures prior to the 2019 fall regional meetings for consideration at the 2020 NCWM Interim Meeting.

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.

NCWM 2016 Interim Meeting: Mr. Ron Hayes (MO, submitter) spoke regarding 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. API remarked that they would like to assist the task group on this project. The Committee is making this a Developing Item.

NCWM 2017 Interim Meeting: The submitter Mr. Hayes asked for the states to participate 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.

NCWM 2018 Interim Meeting: Mr. Hayes gave a presentation regarding this item. Mr. Lou Sakin (Hopkinton, MA) recommended this item be assigned with a specific timetable for development. No other comments were heard on this developing item. The L&R Committee recommends this item as Developing to allow the submitter to finish developing test procedures and review with NIST/OWM staff.

NCWM 2018 Annual Meeting: Mr. Hayes provided an update that he has been doing testing and getting repeatability with his results. Mr. Hayes remarked that when NIST OWM was teaching a Handbook 133 Basic course in Missouri he had an opportunity to use the density meter on some of the test procedures.

NCWM 2019 Interim Meeting: The submitter of this item stated he is close to having an updated proposal posted to the NCWM website. A Michigan regulator stated his desire to see this item remain developing. The Committee recommends this item remain Developing with the stipulation, that if new language is not provided by the 2019 NCWM Annual Meeting, the item will be Withdrawn.

NCWM 2019 Annual Meeting: Mr. Hayes commented that he has a draft of his proposal on the NCWM L&R supporting document website. Mr. Hayes continues to work with states who use the density meters to develop an item under consideration. He also continues to work on the alpha correction.

NCWM 2020 Interim Meeting: Mr. Kevin Upshulte (MO), and Mr. Charles Stutesman (KS) remarked that the submitter has fully developed the language and it is ready to move forward. Ms. Lisa Warfield (NIST OWM) remarked that the purpose statement identifies it is to be used for motor oils, diesel exhaust fluid, and antifreeze. It appears with the latest language has now includes juices, syrups, and vegetable oils. The data submitted only reflects one brand of density meters and there are many types available for use. The Committee would like the submitter to take into consideration comments heard at the regional and NCWM meetings in further development this item. The Committee does not believe this item is fully developed and returned to the submitter.

NCWM 2020 Annual Meeting: Due to the 2020 Covid-19 pandemic, this meeting was adjourned to January 2021, at which time it was held as a virtual meeting. Due to constraint of time, only those items designated as 2020 Voting Items were addressed. All other items were addressed in the subsequent 2021 NCWM Interim Meeting.

NCWM 2021 Interim Meeting: The Committee reviewed the regional association reports. They were unable to locate the updated language document mentioned in the CWMA 2020 Interim Report (either on the CWMA or NCWM website).

- Review of comments from the submitter within the S&T report (2017) which stated, "*Fundamental Considerations of NIST Handbook 44 be considered in defining the suitability criteria of any density meter used in testing. Ms. Butcher also suggested it may be that the NIST EPOs, training materials, or other guidance documents might be a more appropriate place(s) to specify details regarding the selection and use of this equipment and to provide details on its specifications."* and *"the item should be included in other documents such as NIST Handbooks 112 and 105."*

- The test procedure should be written in a format that an inspector can use in the field. This would eliminate the use of active spreadsheets.

- The purpose was for testing of viscous fluids such as motor oils, diesel exhaust fluid (DEF), and antifreeze. The submitter should refocus on those particular items.

- There is a lack of a step-by-step procedure. The test procedure should be done in a clear and concise format so that inspectors understand it.

- Copyrighted materials cannot be reproduced without permission from the manufacturer.

- Look into other digital density meters in the marketplace.

- Where does an inspector find the coefficient of expansion for a product? There is a table referenced but not found within the documents "**See Table 3-X. Reference Temperatures of Liquids.**

- The correction process is written in the top part of the Table 3.X.X. but where do the "approximate viscosities" and "corrections" come from? Has it been verified? If so, where is the supporting data?

- Do all meters use the same correction values or are they unique to the different devices?

- Do all the meters have a feature that allows for the correction function to be disabled to allow an inspector to enter a known correction factor for the product? It should be noted that the correction factor must be recorded so that the manufacturer knows exactly how the density was obtained.

- Provide data to the Conference on the testing and repeatability.

- Inspector may believe that if they are in HB133 they are appropriate for use in enforcement. At best they should only be used audit inspections. The cost of the equipment should be factored into whether there is value to develop for audit only type inspections.

For the reasons stated above the Committee recommended this item be Withdrawn.

Regional Association Comments:

WWMA 2019 Annual Meeting: The Committee heard testimony that the language needs to be written generically for all density meter types. The WWMA reviewed the background information and many of the same concerns and issues cited were raised at their meeting. The submitter's purpose statement on his proposal specified that the test procedure would be for motor oils, diesel exhaust fluid (DEF) and antifreeze however, the submitted document does not correlate with this purpose statement.

The Committee believes that a proposal for the device specifications should be submitted prior to the finalization of the HB133 proposal. Suggestions were provided to the submitter from the S&T in 2017 which stated, "*Fundamental Considerations of NIST Handbook 44 be considered in defining the suitability criteria of any density meter used in testing. Ms. Butcher also suggested it may be that the NIST EPOs, training materials, or other guidance documents might be a more appropriate place(s) to specify details regarding the selection and use of this equipment and to provide details on its specifications."* and *"the item should be included in other documents such as NIST Handbooks 112 and 105."*

The Committee would like to see this remain Developing with the submitter addressing the issues that the WWMA and other regional associations have documented. The WWMA is recommending that this item be Withdrawn if updated work efforts are not submitted to the NCWM L&R by January 2020.

SWMA 2019 Annual Meeting: The Committee reviewed the modified proposal and data submitted by Mr. Ron Hayes (MO, submitter). This procedure needs to be written in generic format to meet specifications for meters that are in the marketplace. The Committee would like this item to be Developing. They also request that the submitter change his purpose statement or apply the test procedure to what is currently stated in the document.

NEWMA 2019 Interim Meeting: No comments were heard during open hearings. The Committee believes the item should remain on the agenda as a developing item. The Committee further believes that final language should be provided by the submitter for the 2020 Interim Meeting. Since this item has remained on the agenda since 2016, if no additional information is supplied by the 2020 Interim Meeting, it should be Withdrawn.

2020 Regional Meetings of the WWMA, NEWMA, and SWMA: These regions adhered to a condensed agenda due to the Covid pandemic and did not consider this item.

CWMA 2020 Interim Meeting: Mr. Ron Hayes (MO, submitter) commented that he has updated language that identifies a few additional test fluids to obtain better precision (see attached document). He is also incorporating recommendations from Mr. David Sefcik (NIST OWM). Mr. Sefcik still needs to convert the density meter table into a usable format for regulators. Currently he is waiting for an additional instrument to finish the method. Ms. Lisa Warfield (NIST OWM) commented that there are concerns with this test procedure, particularly the lack of a step-by-step procedure. Ms. Warfield also commented that the method should be developed to use with different devices manufactures rather than just one. Ms. Warfield appreciates continued collaboration with Missouri. Mr. Charlie Stutesman (KS) commented that he believes the item should be assigned to a task group to allow for more expedient development and inclusion of other devices. Mr. Hayes further commented that the method is not specific to a single device and is intended to be used for any manufacturer that meets the technical specifications. Mr. Hayes is also taking photos to illustrate steps on how to complete the testing. Ms. Warfield agrees a work group might help finalize this method. Mr. Don Onwiler (NCWM Executive Director) commented that a working group needs to be appointed by the NCWM Chairman. Mr. Hayes, submitter, agrees the item should be moved to Assigned status. The Committee recommends that the NCWM L&R Committee consider the creation of a new task group and include a NIST Technical Advisor from NIST, as well as leave the item as Assigned.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.com/publication-16 to review these documents.

NET-20.2 D Section 4.5. Polyethylene Sheeting, Bags and Liners.

Source:
New York State Weights and Measures

Purpose:
Remove antiquated terminology used for test equipment to test the thickness of polyethylene sheeting, bags, and liners.

Item Under Consideration:
Amend Handbook 133 as follows:

4.5. Polyethylene Sheeting, Bags, and Liners

Most polyethylene products are sold by length, width, thickness, area, and net weight. Accordingly, this procedure includes steps to test for each of these measurements.

(Amended 2017)

4.5.1. Test Equipment

- A scale that meets the requirements in Section 2.2. "Measurement Standards and Test Equipment."

- Steel tapes and rulers. Determine measurements of length to the nearest division of the appropriate tape or ruler.

  - Metric units:

    For labeled dimensions 400 mm or less, linear measure: 300 mm in length, 1 mm divisions; or a 1 m ruler with 0.1 mm divisions, overall length tolerance of 0.4 mm.

    For labeled dimensions greater than 400 mm, 30 m tape with 1 mm divisions.

  - U.S. customary units:

    For labeled dimensions 25 in or less, use a 36 in ruler with 1/64 in or 1/100 in divisions and an overall length tolerance of 1/64 in.

    For dimensions greater than 25 in, use a 100 ft tape with 1/16 in divisions and an overall length tolerance of 0.1 in.

- Deadweight dial micrometer (or equal) equipped with a flat anvil, 6.35 mm or (¼ in) diameter or larger, and ~~**a 4.75 mm (3/16 in) diameter**~~ flat ~~**surface on the head of the**~~ spindle **head with a diameter between 3.20 mm (1/8 in) and 12.70 mm (1/2 in)**.

  Note: Electronic or other instruments that provide equivalent accuracy are also permitted.

  - ~~**The mass of the probe head (total of anvil, weight 102 g or [3.6 oz], spindle, etc.) must total 113.4 g (4 oz).**~~ **The pressure exerted by the instrument should not exceed 70 kPa (10 psi).**

  - The anvil and spindle head surfaces should be ground and lapped, parallel to within 0.002 mm (0.0001 in), and should move on an axis perpendicular to their surfaces.

  - The dial spindle should be vertical, and the dial should be at least 50.8 mm (2 in) in diameter.

  - The dial indicator should be continuously graduated to read directly to 0.002 mm (0.0001 in) and should be capable of making more than one revolution. It must be equipped with a separate indicator to indicate the number of complete revolutions. The dial indicator mechanism should be fully jeweled.

  - The frame should be of sufficient rigidity that a load of 1.36 kg (3 lb) applied to the dial housing, exclusive of the weight or spindle presser foot, will not cause a change in indication on the dial of more than 0.02 mm (0.001 in).

  - The indicator reading must be repeatable to 0.001 2 mm (0.000 05 in) at zero.

  - The micrometer should be operated in an atmosphere free from drafts and fluctuating temperature and should be stabilized at ambient room temperature before use.

  Note: Other instruments are commercially available that utilize different methods of measuring thickness. Instruments of this nature are acceptable provided they meet or exceed the precision requirements noted within the latest version of ASTM D6988 "Guide for Determination of Thickness of Plastic Film Test Specimens" and the requirements of the applicable material or product specification or applicable test standards.

- Gage blocks covering the range of thicknesses to be tested should be used to check the accuracy of the micrometer

- T-square

Background/Discussion:
This item has been assigned to the submitter for further development. For more information or to provide comment, please contact:

Mr. Mike Sikula
New York Department of Agriculture and Markets
518-457-3452, mike.sikula@agriculture.ny.gov

This will update the test equipment to allow for the use of other type of instruments to perform the test procedure. In addition, it aligns the test equipment within the latest version of ASTM D6988 "Guide for Determination of Thickness of Plastic Film Test Specimens".

NCWM 2021 Interim Meeting: Mr. Kurt Floren (Los Angeles Co., CA) had concern with the spindle head having a diameter of 3.20 mm and 12.70 mm, due to the type of product being tested as this may create inconsistencies within the thickness. Mr. Floren would like to see data that justified this range. In addition, there are many other instruments that are available in the marketplace to do testing. Therefore, Mr. Floren has concerns with this item proceeding as currently written. What is the current industry practice with this type of procedure? The Committee would like the submitter to review the recommendations that came out of the fall regional meetings. The submitter should also address any procedural differences between the current procedure and use of an electronic instrument. The Committee recommends this item as a Developing item. Mr. Kevin Schnepp (CA) noted that ASTM D6988 has a maximum pressure of 70 kPa (10 psi) for thinner films and for thicker films, a pressure range between 160 and 185 kPa (23 and 27 psi). Mr. Floren also expressed concerns with the variability in plastics and the striations occur in plastics. The Committees did not have any supporting data or repeatability test and asked that the developer review all the comments within this item by fall Regional Association Meetings.

Regional Association Comments:

WWMA 2019 Annual Meeting: Mr. Kurt Floren (Los Angeles, Co., CA) provided modifications to the language to the Committee. The Committee addressed his concerns by modifying the language as it appears below. The WWMA cautions that the ASTM D6988 "Standard Guide for Determination of Thickness of Plastic Film Test Specimens" needs to be researched further to make sure it is applicable. It appears that ASTM D6988 is a Guide and not a specification standard. There is a note within the standard that appears to prohibit the use for this application. The Committee is requiring data from the submitter that changes to the micrometer specifications are justified. Further development of the entire test procedure (not just test equipment) will need to occur for its applicability for the electronic instrument. The Committee recommends this be a Developmental item requiring confirmation of the applicability of the ASTM standard.

4.5. Polyethylene Sheeting, Bags, and Liners

Most polyethylene products are sold by length, width, thickness, area, and net weight. Accordingly, this procedure includes steps to test for each of these measurements.

(Amended 2017)

4.5.1. Test Equipment

- A scale that meets the requirements in Section 2.2. "Measurement Standards and Test Equipment."

- Steel tapes and rulers. Determine measurements of length to the nearest division of the appropriate tape or ruler.

- Metric units:

  For labeled dimensions 400 mm or less, linear measure: 300 mm in length, 1 mm divisions; or a 1 m ruler with 0.1 mm divisions, overall length tolerance of 0.4 mm.

  For labeled dimensions greater than 400 mm, 30 m tape with 1 mm divisions.

- U.S. customary units:

  For labeled dimensions 25 in or less, use a 36 in ruler with $^{1}/_{64}$ in or $^{1}/_{100}$ in divisions and an overall length tolerance of $^{1}/_{64}$ in.

  For dimensions greater than 25 in, use a 100 ft tape with $^{1}/_{16}$ in divisions and an overall length tolerance of 0.1 in.

- **Thickness Measuring Device (use one of the following)**

  - Deadweight dial micrometer (or equal) equipped with a flat anvil, 6.35 mm or (¼ in) diameter or larger, and ~~**a 4.75 mm ($^{3}/_{16}$ in) diameter**~~ flat ~~**surface on the head of the**~~ spindle **head with a diameter between 3.20 mm ($^{1}/_{8}$ in) and 12.70 mm ($^{1}/_{2}$ in)**.

    ~~**Note: Electronic or other instruments that provide equivalent accuracy are also permitted.**~~

    ~~– **The mass of the probe head (total of anvil, weight 102 g or [3.6 oz], spindle, etc.) must total 113.4 g (4 oz).**~~ **The pressure exerted by the instrument should not exceed 70 kPa (10 psi).**

    – The anvil and spindle head surfaces should be ground and lapped, parallel to within 0.002 mm (0.0001 in), and should move on an axis perpendicular to their surfaces.

    – The dial spindle should be vertical, and the dial should be at least 50.8 mm (2 in) in diameter.

    – The dial indicator should be continuously graduated to read directly to 0.002 mm (0.0001 in) and should be capable of making more than one revolution. It must be equipped with a separate indicator to indicate the number of complete revolutions. The dial indicator mechanism should be fully jeweled.

    – The frame should be of sufficient rigidity that a load of 1.36 kg (3 lb) applied to the dial housing, exclusive of the weight or spindle presser foot, will not cause a change in indication on the dial of more than 0.02 mm (0.001 in).

    – The indicator reading must be repeatable to 0.001 2 mm (0.000 05 in) at zero.

    – The micrometer should be operated in an atmosphere free from drafts and fluctuating temperature and should be stabilized at ambient room temperature before use.

    ~~**Note: Other instruments are commercially available that utilize different methods of measuring thickness. Instruments of this nature are acceptable provided they meet or exceed the precision requirements noted within the latest version of ASTM D6988 "Guide for Determination of Thickness of Plastic Film Test Specimens" and the requirements of the applicable material or product specification or applicable test standards.**~~

    - **Electronic Instrument that meet or exceed the precision requirements within the latest version of ASTM D6988 "Guide for Determination of Thickness of Plastic Film Test Specimens" and**

the requirements of the applicable material or product specification or applicable test standards

- Gage blocks covering the range of thicknesses to be tested should be used to check the accuracy of the micrometer

- T-square

SWMA 2019 Annual Meeting: The Committee did not hear any comments regarding this item from regulators. It was noted that if you are adding electronic instruments then the test procedure should also address them throughout the test procedure. The SWMA encourages the submitter to develop this proposal.

NEWMA 2020 Interim Meeting: Mr. Mike Sikula (NY, submitter) reported this item is fully developed.

CWMA 2020 Interim Meeting: Ms. Lisa Warfield (NIST OWM) commented that she reached out to Mr. Mike Sikula and Mr. Jim Willis (NY, submitter) and recommended that they reach out to the D20 ASTM Committee for further review on this item. Mr. Loren Minnich (KS) a regulator, believes there is a word missing between the word "of" and "thickness" there should be a verb. Ms. Warfield checked and indicated the word "measuring" should be inserted. Based on comments heard during the open hearing, the Committee believes the item should remain as a Developing item.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.com/publication-16 to review these documents.

OTH – OTHER ITEMS

OTH-07.1 D Fuels and Lubricants Subcommittee

Source:
NCWM Fuels and Lubricants Subcommittee (FALS)

Purpose:
Provide an update of the activities of this Subcommittee which works on direction from and reports to the L&R Committee. The mission of FALS is to assist the L&R Committee in the development of agenda items that affect Handbook 130, Uniform Fuels and Automotive Lubricants Inspection Law and Uniform Fuels and Automotive Lubricants Regulation. The Subcommittee consists of regulators and associate members who have subject matter expertise in the area of fuels and lubricants. The Subcommittee will be called upon to aid in the development, provide guidance, and help establish NCWM position on items concerning fuels and lubricants.

Item Under Consideration:
Not Applicable.

Background/Discussion:
This item is to provide a report on the activities of the Fuels and Lubricants Subcommittee (FALS) which reports and provides recommendations to the Laws and Regulations Committee.

For more information or to provide comment, please contact the FALS Chair:

Mr. Bill Striejewske, FALS Chair
Nevada Department of Agriculture/Bureau of Petroleum Technology
775-353-3792, wstriejewske@agri.state.nv.us

Due to ongoing travel restrictions due to the COVID-19 pandemic, FALS met virtually at the 2021 NCWM Meeting on Sunday, January 10, 2021, to review items related to fuel and automotive fluid standards that appear on the L&R

agenda. FALS discussed those items that have been assigned to them. As such, there was discussion of one block of four items related to the 2019 EPA Final Rule concerning E15. There were also updates on two existing focus groups, including one working on a FALS Committee operations document. There were two presentations given, one on new Item Block 6 Labeling of Transmission Fluid and the other on the recently finalized EPA Streamlining Rule. Focus groups were formed to work on each of these items. The following is a brief summary of the items mentioned above.

Update on EPA Rule Change Focus Group: At the 2019 NCWM Annual Meeting the L&R Committee tasked the FALS to review regulations under 40 CFR 80.20 to ensure there are no conflicts within Handbook 130, Fuels and Automotive Lubricants Regulations. Focus Group Chair, Mr. Bill Striejewske (NV) stated that he had allowed the focus group to become dormant before they had completed their task. Earlier in the meeting, Mr. Prentiss Searles (API, submitter of Block 4 within 2021 NCWM L&R Agenda) requested the entire Block 4 item be withdrawn. Mr. Searles stated it needs to be reviewed and further developed as necessary. There was also discussion that it appeared that the original request from the L&R Committee and the work to continuing developing Block 4 Items are related. Mr. Searles agreed to take over as chair of this Focus Group. After review of the items in Block 4, the focus group will further examine the EPA Final Rule to identify any other issues relevant to Handbook 130.

FALS structure discussions and Focus Group: At the 2020 NCWM Interim Meeting, during both the FALS session and the Board of Directors (BOD) open hearings, there was robust discussion about BOD Item SPB-5, which would elevate FALS to Standing Committee status. The elevation of FALS becoming an independent standing Committee was unanimously decided against by the FALS members. This item will address a lack of structure and a level of systemic dysfunction within the workings of the subcommittee. In the time since, the Interim Meeting, FALS has held several discussions based around the various issues brought up during these discussions. After several productive calls and web conferencing meetings, a Focus Group was formed, composed of a broad range of stakeholders. This group is currently working on a document of standard operating procedures. Once completed, the document will be distributed to the entire FALS membership for review and comment, then it will be submitted to the Board of Directors. FALS members are expected to receive the draft SOP document in March, and the Board prior to the Annual Meeting in July 2021

Item Block 6 Transmission Fluid Focus Group: Ms. Joanna Johnson, (on behalf of the Automotive Oil Change Association [AOCA]) expressed concern about Item Block 6 Transmission Fluid, and specifically the wording of Item FLR-21.2. Labeling and Identification of Transmission Fluid. While supportive of the intent, AOCA believes that this block requires more work to be fully developed and to do what is intended. Ms. Johnson has spoken at length with the submitter, who is also supportive of continuing work developing the Item Block. Ms. Johnson has agreed to chair a Focus Group to work on the further development of this block. There has been interest and enthusiasm for the work among a range of stakeholders.

EPA Streamlining Rule Focus Group: After a multiyear process, the EPA Streamlining Rule was signed in late 2020. The rule has already drawn interest within ASTM International, and Ms. Marilyn Herman (Herman & Associates) related that Handbook 130 may require updating. While it is not yet clear the extent to which the rule may impact Handbook 130, Ms. Herman will chair a Focus Group examining the impact of the Streamlining Rule on the handbook and determine what updates may be required.

Regional Association Comments:

WWMA 2019 Annual Meeting: There were no updates provided.

SWMA 2019 Annual Meeting: There were no updates provided.

NEWMA 2019 Interim Meeting: There were no updates provided.

2020 Regional Meetings of the WWMA, NEWMA, and SWMA: These regions adhered to a condensed agenda due to the Covid pandemic and did not consider this item.

CWMA 2020 Interim Meeting: There were no updates provided.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.com/publication-16 to review these documents.

OTH-11.1 D Packaging and Labeling Subcommittee

Source:
NCWM Packaging and Labeling Subcommittee (PALS)

Purpose:
Provide an update of the activities of PALS who reports to the L&R Committee. The mission of PALS is to assist the L&R Committee in the development of agenda items, NCWM positions and new standards related to packaging and labeling. PALS will also be called upon to provide important and much needed guidance to the regulatory and consumer packaging communities on difficult questions. PALS members comprise of a Chair, eight voting members, and anyone interested in packaging and labeling standards.

Item Under Consideration:
Not Applicable.

Background/Discussion:
This item is to provide a report on the activities of PALS which reports and provides recommendations to the Laws and Regulations Committee.

For more information or to provide comment, please contact:

Mr. Chris Guay, PALS Chair
513-652-6597, guay.cb@gmail.com

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 reported that work is currently being progressed through monthly webinar meetings and at the NCWM meetings. Members of NCWM can participate in the PALS meetings by contacting Mr. Guay. PALS members are responsible for providing updates at their Regional Meetings. Mr. Guay added PALS will be developing proposals and in addition providing guidance and recommendations on existing proposals as assigned by the L&R Committee. He stressed the importance of having key federal agencies (FDA, FTC, and USDA) participating.

At the 2020 Interim Meeting, Mr. Guay reported that PALS is continuing to draft a proposed regulation and accompanying "Best Practice" document regarding products sold via e-commerce. The focus of this document is to help provide more clarity on the information necessary for consumers to make informed product choices on-line and for consumers to confirm receipt of the products ordered. PALS currently believes certain information is better included in a regulation while other information is better provided as guidance or "Recommended Best Practice" document. PALS will work on development of this proposed regulation and proposed guidance in the spring of 2020 with a target to have a draft proposal prepared by the 2020 NCWM Annual Meeting. Separately, PALS believes the text of "Recommended Best Practice" for quantity expressions is complete. Also, PALS is developing an illustrative appendix with graphics support being provided by NCWM.

PALS held a session at the beginning of the combined 2020 NCWM Annual and 2021 Interim Meeting to address items under development and to discuss a request for NCWM comment and the final rule issued by the Alcohol and Tobacco Tax and Trade Bureau (TTB).

PALS was asked it would be willing to support the dual U.S. customary/SI net quantity statement provisions contained in a Citizen's Petition to FDA made by the North American Olive Oil Association. PALS reviewed the Olive Oil Association Petition as well as the specific request regarding net quantity labeling and determined that NCWM should not take a position on the petition.

PALS reviewed the TTB final rule regarding prescribed sizes for beer, wine and spirits, noting that TTB has elected to expand the number of prescribed sizes allowed for certain alcoholic beverages. It was noted that TTB provided clarification on labeling in both SI and U.S. customary units both made no specific labeling requirement changes.

PALS reviewed the framework for a proposed Handbook 130 regulation regarding products sold through ecommerce. This regulation would focus on ensuring buyers have sufficient information to make an accurate product selection and value comparison at the time of purchase, while also ensuing the buyer can confirm the product purchased is the product they receive. PALS plans to make this proposal its priority for 2021.

PALS is planning to have the "Recommended Best Practice" document for quantity related expressions appearing on a principal display panel and the proper declaration of net quantity completed by this summer. The document has been completed and the work on the illustrative appendix is ongoing.

Regional Association Comments:

WWMA 2019 Annual Meeting: There were no updates provided.

SWMA 2019 Annual Meeting: There were no updates provided.

NEWMA 2019 Interim Meeting: There were no updates provided.

2020 Regional Meetings of the WWMA, NEWMA, and SWMA: These regions adhered to a condensed agenda due to the Covid pandemic and did not consider this item.

CWMA 2020 Interim Meeting: PALS Chair Chris Guay indicated that PALS has not met for a few months due to the COVID-19 pandemic but plans to reconvene in November 2020.

Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to https://www.ncwm.com/publication-16 to review these documents.

Mr. John McGuire, New Jersey | Committee Chair
Mr. Mauricio Mejia, Florida | Member
Mr. Doug Rathbun, Illinois | Member
Mr. Tim Elliott, Washington | Member
Mr. Tory Brewer, West Virginia | Member
Mr. Prentiss Searles, American Petroleum Institute | 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