

Report of the Laws and Regulations (L&R) Committee

Judy Cardin, Chair
Wisconsin Weights and Measures

200 INTRODUCTION

This is the report of the Laws and Regulations Committee (hereinafter referred to as the “Committee”) for the 98th Annual Meeting of the National Conference on Weights and Measures (NCWM). This report is based on the Interim Report offered in the NCWM Publication 16, “Committee Reports,” testimony at public hearings, comments received from the regional weights and measures associations and other parties, the NCWM 2013 Online Position Forum, the addendum sheets issued at the Annual Meeting, and actions taken by the membership at the voting session of the Annual Meeting. The Informational items shown below were adopted as presented when this report was approved.

Table A identifies the agenda items and appendix items. The agenda items in the Report are identified by Reference Key Number, title, and page number. The first three digits of the Reference Key Numbers of the items are assigned from the subject series listed below. Voting items are indicated with a “**V**” after the item number. Items marked with an “**I**” are Informational. Items marked with a “**D**” are Developing items. The developing designation indicates an item has merit; however, the item is returned to the submitter for further development before any further action is taken by the Committee. Items marked “**W**” have been Withdrawn from consideration. Table B provides a list of acronyms used in this report, and Table C provides a summary of the results of the voting on the Committee’s items and the report in its entirety.

This report contains recommendations to amend National Institute of Standards and Technology (NIST) Handbook 130, 2013 Edition, “Uniform Laws and Regulations,” or NIST Handbook 133, “Checking the Net Contents of Packaged Goods,” Fourth Edition (January 2013). Proposed revisions to the handbook(s) are shown in **bold face print** by ~~striking out~~ information to be deleted and underlining information to be added. New items proposed for the handbooks are designated as such and shown in **bold face print**. Text presented for information only is shown in *italic* print. When used in this report, the term “weight” means “mass.”

Note: The policy of NIST is to use metric units of measurement in all of its publications; however, recommendations received by the NCWM technical committees have been printed in this publication as they were submitted and, therefore, some may contain only reference to inch-pound units.

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B — **Item 232-1:** NIST Handbook 130, Uniform Method of Sale of Commodities, Section 2.27. Retail Sales of Natural Gas Sold as Vehicle Fuel; and
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C — **Item 232-2:** NIST Handbook 130, Uniform Method of Sale of Commodities, Sections 2.33. Oil, 2.33.1.4. Engine Service Category, 2.33.1.4.1. Vehicle or Engine Manufacturer Standards, and 2.33.1.4.2. Inactive or Obsolete Service Category; and
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Table B
Glossary of Acronyms and Terms

Acronym	Term	Acronym	Term
ACEA	European Automobile Manufacturers Association	ISO	International Organization for Standardization
ASTM	ASTM International	L&R	Laws and Regulations
API	American Petroleum Institute	LNG	Liquefied Natural Gas
AKI	Minimum Antiknock Index	MATG	Moisture Allowance Task Group
AOCA	Automotive Oil Change Association	MAV	Maximum Allowable Variation
BOV	Bag on Valve	MON	Motor Octane Number
BTU	British Thermal Unit	NAA	National Aerosol Association
CFR	Code of Federal Regulations	NADA	National Automobile Dealers Association
CNG	Compressed Natural Gas	NARUC	National Association of Regulatory

Acronym	Term	Acronym	Term
			Utility Commissioners
CRC	Coordinating Research Council	NBB	National Biodiesel Board
CWMA	Central Weights and Measures Association	NCWM	National Conference on Weights and Measures
DGE	Diesel Gallon Equivalent	NEWMA	Northeastern Weights and Measures Association
DLE	Diesel Liter Equivalent	NIST	National Institute of Standards and Technology
DOT	Department of Transportation	NPA	National Pasta Association
EPA	Environmental Protection Agency	NTEP	National Type Evaluation Program
EVF&S	Electric Vehicle Fueling and Submetering	OEM	Original Equipment Manufacturer
EVSE	Electric Vehicle Supply Equipment	OWM	Office of Weights and Measures
FALS	Fuels and Lubricants Subcommittee	PALS	Packaging and Labeling Subcommittee
FDA	Food and Drug Administration	PEV	Plug-in Electric Vehicle
FPI	Foodservice Packaging Industry	PUC	Public Utility Commissions'
FPLA	Fair Packaging and Labeling Act	RON	Research Octane Number
FTC	Federal Trade Commission	SAE	Society of Automotive Engineers
GGE	Gasoline Gallon Equivalent	SG	Specific Gravity
GLE	Gasoline Liter Equivalent	SWMA	Southern Weights and Measures
GM	General Motors	UPLR	Uniform Packaging and Labeling Regulation
GUM	Guide to the Expression in Uncertainty Measurement	UWML	Uniform Weights and Measures Law
IEC	International Electrotechnical Association	USNWG	U.S. National Work Group
ILMA	Independent Lubricant Manufacturers Association	VIM	International Vocabulary of Metrology
ILSAC	International Lubricants Standardization and Approval Committee	WWMA	Western Weights and Measures Association

Table C
Voting Results

Reference Key Number	House of State Representatives		House of Delegates		Results
	Yeas	Nays	Yeas	Nays	
221-1	34	0	34	0	Adopted
232-3	35	0	35	0	Adopted
232-5	34	0	34	0	Adopted
237-5	35	0	35	0	Adopted
260-1	28	6	29	4	Adopted

Details of All Items
(In order by Reference Key)

221 NIST HANDBOOK 130 – WEIGHTS AND MEASURES LAW

221-1 V Section 1. Definitions

(This item was adopted.)

Source:

National Institute of Standards and Technology, Office of Weights and Measures (OWM) (2012)

Purpose:

Bring the Uniform Weights and Measures Law into agreement with current international agreement on terminology on these metrology-related definitions.

Item Under Consideration:

Amend NIST Handbook 130, Uniform Weights and Measures Law as follows:

1.14. Calibration. – ~~An A set of operations which establishes, operation that,~~ under specified conditions, ~~the in a first step, establishes a relation relationship~~ between the quantity values ~~indicated by a measuring instrument or measuring system, or values represented by a material measure, and the corresponding known values of a measurand.~~ with measurement uncertainties provided by measurement standards and corresponding indications with associated measurement uncertainties and, in a second step, uses this information to establish a relation for obtaining a measurement result from an indication.

(Added 2005) (Amended 2013)

1.15. Metrological Traceability. – The property of ~~the a measurement~~ result ~~of a measurement or the value of a standard~~ whereby the result ~~it~~ can be related to a reference ~~stated references, usually national or international standards,~~ through a documented ~~an~~ unbroken chain of calibrations, each contributing to the measurement uncertainty. ~~comparisons all having stated uncertainties.~~

(Added 2005) (Amended 2013)

1.16. Measurement Uncertainty. – A non-negative parameter ~~associated with the result of a measurement that characterizes characterizing~~ the dispersion of the quantity values ~~that could reasonably be being~~ attributed to a measurand, the measurand. based on the information used.

(Added 2005) (Amended 2013)

1.19. Standard, Reference Measurement. – A measurement standard, ~~generally of the highest metrological quality available at a given location, from which measurements made at that location are derived.~~ designated for the calibration of other measurement standards for quantities of a given kind in a given organization or at a given location. The term “reference measurement standards” usually means the physical standards of the state that serve as the legal reference from which all other standards for weights and measures within that state are derived.

(Added 2005) (Amended 2013)

1.20. Standard, Working Measurement. – A measurement standard that is ~~usually calibrated against a reference standard, and is~~ used routinely to calibrate or ~~check material measures, measuring instruments or reference materials, verify measuring instruments or measuring systems.~~ The term “working measurement standards” means the physical standards that are traceable to the reference standards through ~~comparisons—calibrations or verifications,~~ using acceptable laboratory procedures, and used in the enforcement of weights and measures laws and regulations.

(Added 2005) (Amended 2013)

1.21. Metrological Traceability Chain. – Sequence of measurement standards and calibrations that is used to relate a measurement result to a reference.

(Added 2013)

1.22. Metrological Traceability to a Measurement Unit. – Metrological traceability where the reference is the definition of a measurement unit through its practical realization.

(Added 2013)

Background/Discussion:

The 1993 version of the *International Vocabulary of Metrology* (VIM) was updated in 2008 to reflect changes in international agreement about several of the key definitions it contains, in order to better align the definitions with the philosophy of the *Guide to the Expression of Uncertainty in Measurement* (GUM). The current definitions of five entries in the Uniform Weights and Measures Law (UWML) were taken from the 1993 version of the VIM, and so do not reflect the changes introduced in the 2008 version of the VIM. The changes proposed below are to update those five entries so that they reflect current international agreement on terminology. Two new definitions that are related to the other five definitions are also being proposed to be added.

By incorporating these seven definitions, the UWML will be brought into agreement with current international agreement on these metrology-related definitions. Since the GUM is referenced in ISO/IEC 17025 (General requirements for the competence of testing and calibration laboratories), which is used as the basis for accrediting State metrology laboratories, incorporating these updated definitions into the UWML will also underpin the long-term harmonization of vocabulary between the NCWM and the international standards used to regulate the testing and calibration laboratories upon which NCWM depends (such as for National Type Evaluation Program [NTEP]).

Harmonization of NCWM terminology with internationally accepted terminology helps promote global acceptance of U.S. products abroad. Proposed modifications could interfere with commonly used NCWM terminology/concepts, but the presenter of this proposal believes that is not the case here.

Previous Item Under Consideration:

1.14. Calibration. – An ~~set of operations which establishes, under specified conditions, the relationship between values indicated by a measuring instrument or measuring system, or values represented by a material measure, and the corresponding known values of a measurand.~~ operation that, under specified conditions, in a first step, establishes a relation between the quantity values with measurement uncertainties provided by measurement standards and corresponding indications with associated measurement uncertainties and, in a second step, uses this information to establish a relation for obtaining a measurement result from an indication.

NOTE 1: A calibration may be expressed by a statement, calibration function, calibration diagram, calibration curve, or calibration table. In some cases, it may consist of an additive or multiplicative correction of the indication with associated measurement uncertainty.

NOTE 2: Calibration should not be confused with adjustment of a measuring system, often mistakenly called “self-calibration,” nor with verification of calibration.

NOTE 3: Often, the first step alone in the above definition is perceived as being calibration.

(Added 2005) (~~Amended 20XX~~)

1.15. Metrological Traceability. – ~~The property of the result of a measurement or the value of a standard whereby it can be related to stated references, usually national or international standards, through an unbroken chain of comparisons all having stated uncertainties.~~ **property of a measurement result whereby the result can be related to a reference through a documented unbroken chain of calibrations, each contributing to the measurement uncertainty.**

NOTE 1: For this definition, a “reference” can be a definition of a measurement unit through its practical realization, or a measurement procedure including the measurement unit for a non-ordinal quantity, or a measurement standard.

NOTE 2: Metrological traceability requires an established calibration hierarchy.

NOTE 3: Specification of the reference must include the time at which this reference was used in establishing the calibration hierarchy, along with any other relevant metrological information about the reference, such as when the first calibration in the calibration hierarchy was performed.

NOTE 4: For measurements with more than one input quantity in the measurement model, each of the input quantity values should itself be metrologically traceable and the calibration hierarchy involved may form a branched structure or a network. The effort involved in establishing metrological traceability for each input quantity value should be commensurate with its relative contribution to the measurement result.

NOTE 5: Metrological traceability of a measurement result does not ensure that the measurement uncertainty is adequate for a given purpose or that there is an absence of mistakes.

NOTE 6: A comparison between two measurement standards may be viewed as a calibration if the comparison is used to check and, if necessary, correct the quantity value and measurement uncertainty attributed to one of the measurement standards.

NOTE 7: The ILAC considers the elements for confirming metrological traceability to be an unbroken metrological traceability chain to an international measurement standard or a national measurement standard, a documented measurement uncertainty, a documented measurement procedure, accredited technical competence, metrological traceability to the SI, and calibration intervals (see ILAC P 10:2002).

NOTE 8: The abbreviated term “traceability” is sometimes used to mean “metrological traceability” as well as other concepts, such as “sample traceability” or “document traceability” or “instrument traceability” or “material traceability”, where the history (“trace”) of an item is meant. Therefore, the full term of “metrological traceability” is preferred if there is any risk of confusion.

(Added 2005) (~~Amended 20XX~~)

1.16. Measurement Uncertainty. – ~~A parameter associated with the result of a measurement that characterizes the dispersion of the values that could reasonably be attributed to the measurand.~~ **non-negative parameter characterizing the dispersion of the quantity values being attributed to a measurand, based on the information used.**

NOTE 1: Measurement uncertainty includes components arising from systematic effects, such as components associated with corrections and the assigned quantity values of measurement standards, as well as the definitional uncertainty. Sometimes estimated systematic effects are not corrected for but, instead, associated measurement uncertainty components are incorporated.

NOTE 2: The parameter may be, for example, a standard deviation called standard measurement uncertainty (or a specified multiple of it), or the half-width of an interval, having a stated coverage probability.

NOTE 3: Measurement uncertainty comprises, in general, many components. Some of these may be evaluated by Type A evaluation of measurement uncertainty from the statistical distribution of the quantity values from series of measurements and can be characterized by standard deviations. The other components, which may be evaluated by Type B evaluation of measurement uncertainty, can also be characterized by standard deviations, evaluated from probability density functions based on experience or other information.

NOTE 4: In general, for a given set of information, it is understood that the measurement uncertainty is associated with a stated quantity value attributed to the measurand. A modification of this value results in a modification of the associated uncertainty.

(Added 2005) (~~Amended 20XX~~)

1.19. Standard, Reference Measurement. – ~~A standard, generally of the highest metrological quality available at a given location, from which measurements made at that location are derived.~~ **measurement standard designated for the calibration of other measurement standards for quantities of a given kind in a given organization or at a given location.** The term “reference standards” means the physical standards of the state that serve as the legal reference from which all other standards for weights and measures within that state are derived.

(Added 2005) (~~Amended 20XX~~)

1.20. Standard, Working Measurement. – ~~A standard that is usually calibrated against a reference standard, and is used routinely to calibrate or check material measures, measuring instruments or reference materials.~~ **measurement standard that is used routinely to calibrate or verify measuring instruments or measuring systems.** The term “working standards” means the physical standards that are traceable to the reference standards through comparisons, using acceptable laboratory procedures, and used in the enforcement of weights and measures laws and regulations.

NOTE 1: A working measurement standard is usually calibrated with respect to a reference measurement standard.

NOTE 2: In relation to verification, the terms “check standard” or “control standard” are also sometimes used.

(Added 2005) (~~Amended 20XX~~)

1.21. Metrological Traceability Chain. – **Sequence of measurement standards and calibrations that is used to relate a measurement result to a reference.**

NOTE 1: A metrological traceability chain is defined through a calibration hierarchy.

NOTE 2: A metrological traceability chain is used to establish metrological traceability of a measurement result.

NOTE 3: A comparison between two measurement standards may be viewed as a calibration if the comparison is used to check and, if necessary, correct the quantity value and measurement uncertainty attributed to one of the measurement standards.

(Added 20XX)

1.22. Metrological Traceability to a Measurement Unit. – **Metrological traceability where the reference is the definition of a measurement unit through its practical realization.**

NOTE 1: The expression “traceability to the SI” means “metrological traceability to a measurement unit of the International System of Units”.

(Added 20XX)

2011 CWMA Interim Meeting: Four officials commented that they do not support this proposal and asked why the international vocabulary could not align with NCWM. An official asked that NIST, OWM provide examples of problems caused by the lack of alignment with these two publications. CWMA did not forward the item to NCWM.

2011 WWMA Annual Meeting: An official supported the efforts to harmonize the relationship with international counterparts and believes this item should be supported on those grounds. The Committee supported the idea of the proposal but would like to have staff review this item before proceeding. WWMA forwarded the item to NCWM, recommending it as an Informational Item.

2011 NEWMA Interim Meeting: The Committee recognized that uniformity of definitions in the international marketplace will result in less confusion. NEWMA forwarded the item to NCWM, recommending it as a Developing Item.

2011 SWMA Annual Meeting: No comments were heard. The Committee recommended allowing more time for internal review by members. SWMA forwarded the item to NCWM, recommends it be forwarded to NCWM as an Informational Item.

2012 NCWM Interim Meeting: The submitter explained that the proposal allows for alignment with the international definitions. There is concern that the international language does not conform to existing language in NIST Handbook 130. The language appears to be too complicated and could cause misinterpretation. The Committee recommended that this language be returned to the submitter for language review and formatting. They would like the submitter to share the revised document at the 2012 CWMA and NEWMA Annual meetings. The 2012 L&R Committee designated this item as a Developing Item.

2012 NEWMA Annual Meeting: NEWMA supported this item and recommended that the item remain as a Developing Item.

2012 CWMA Annual Meeting: A NIST Technical Advisor submitted modified definitions and provided additional background information as follows:

Background of each definition (May 2012)

1.14. Calibration: Justification to amend the definition:

This revision updates the current definition by clarifying that a calibration not only involves comparing indications of measuring instruments with corresponding values (and uncertainties) of measurement standards, but also involves using these comparisons in an “inverse” manner, in order to be able to assign a measured value and measurement uncertainty to an item being measured by the measuring instrument, based on the indication of the measuring instrument. By updating this definition, UWML will recognize that calibration involves a two-step process.

1.15. Metrological Traceability: Justification to amend the definition:

This revision will update the current definition in four significant ways. First, in the 2008 VIM, “measurement result” means a value and an uncertainty (not just a value, as it meant in the 1993 VIM), so that traceability now applies to both the value and the uncertainty. Second, it is recognized that any acceptable “reference” can be used, and it doesn’t have to be a national or international standard. Third, the unbroken chain has to be documented, which wasn’t specified in the 1993 definition. And fourth, the chain is a chain of calibrations, and not just comparisons. This is to recognize that a comparison alone is not sufficient for traceability, since a comparison does not result in values being transferred along the chain (as a calibration does). Also, the term “Metrological” is added in front of “Traceability” in order to distinguish this type of traceability from other types (e.g., document traceability). By updating this definition, the UWML will be consistent with international practice, such as used in documents from the International Organization for Standardization (ISO) and

International Electrotechnical Commission (IEC) that pertain to accreditation requirements for (state) metrology laboratories (e.g., ISO/IEC 17025).

1.16. Measurement Uncertainty: Justification to amend the definition:

This revision updates the current definition by first clarifying that a measurement uncertainty cannot be negative, and also by removing “that could reasonably be attributed”, which some people found to be confusing. The term “Measurement” was added in order to distinguish this type of uncertainty from other types. The advantage to updating this definition is that the revisions will bring it into agreement with the 2008 VIM definition.

1.19. Standard, Reference Measurement: Justification to amend the definition:

This revision will update the current definition in two ways. First, it would no longer be required that a reference measurement standard be of the highest quality available (for example, it could be lower in a metrological traceability chain). Second, it is specified that a reference measurement standard is intended to be used for calibration of other measurement standards (as opposed to being used to make routine measurements). The term “Measurement” was added to the term in order to distinguish this type of reference standard from other types. Updating this definition will reflect current international agreement about reference measurement standards that is consistent with the 2008 VIM.

1.20. Standard, Working Measurement: Justification to amend the definition

This revision will update the current definition in two ways. First, a working standard would no longer be required to be directly calibrated by a reference standard (it could, for example, be calibrated by another working standard). Also, this revision will clarify that a working standard can be used for both calibration and verification. The word “Measurement” was added in order to distinguish this type of standard from other types of working standards. By updating this definition, the UWML will reflect current international agreement about working measurement standards that is consistent with the 2008 VIM.

1.21. Metrological Traceability Chain: Justification to add the following definition to the UWML:

This is a new definition for that is intended to support the revision to the definition of “metrological traceability” by explaining what is meant in the definition by “chain.” By adding this definition, the UWML will reflect current international agreement on traceability that is consistent with ISO and IEC documents that pertain to accreditation requirements for (state) metrology laboratories.

1.22. Metrological Traceability to a Measurement Unit: Justification to add the following definition to the UWML:

This is a new definition that is intended to support the revision to the definition of “metrological traceability” by explaining what is meant by the expression “traceability to the SI”. For example, “(metrological) traceability to the SI” means metrological traceability to the definition of the measurement unit “kilogram” (kg) through the practical realization of the kg at NIST, obtained by calibration of a NIST mass artifact, having a mass of about 1 kg, against the international kilogram in Paris. By adding this definition to the UWML, it will reflect current international agreement on traceability that is consistent with ISO and IEC documents that pertain to accreditation requirements for (state) metrology laboratories.

CWMA requested that the submitter of the proposal provide a presentation at the 2012 NCWM Annual Meeting to brief the Conference on the changes and effects to each definition to help provide clarity. CWMA recommended that the item remain as a Developing Item.

2012 NCWM Annual Meeting: Dr. Charles Ehrlich (NIST, OWM) clarified the purpose of this item. He will provide a presentation at the 2013 NCWM Interim meeting that will further explain each proposed definition. The Committee updated its report to include Dr. Ehrlich’s explanations for each definition as presented at the CWMA Annual Meeting and updated the Item under Consideration to reflect the most recent modifications by Dr. Ehrlich.

2012 WWMA Annual Meeting: There was concern that the proposed definitions are too technical/scientific. The Uniform Weights and Measures Law is for the commercial area. It would be difficult to explain the proposed definitions to a layman or lawyer. The Committee believed this proposal was fully developed. There was also concern that NCWM would be adapting to foreign language standards. Dr. Ehrlich will make a presentation at the

NCWM 2013 Interim meeting and will perhaps respond to the concerns. The proposed language would greatly impact the laboratory. Most state laboratories have budgetary constraints and may not be able to conform without repercussions. It may also impact some laboratory accreditations/certifications. The Committee recommended that the states provide additional input to Mr. Raymond Johnson (New Mexico) and Tim Lloyd (Montana) prior to the January 2013 Interim Meeting. WWMA recommended that the item be an Informational Item.

2012 SWMA Annual Meeting: A weights and measures consultant commented that the current definitions are very well thought out and carefully worded definitions. Concern was expressed with the highly technical nature of the definitions and whether these definitions should be in weights and measures law. The average regulator may not be able to decipher the meaning of the definitions or properly interpret and apply them. It was suggested that the definitions may be more appropriate in metrology manuals. SWMA recommended that the item be a Developing Item.

2013 NCWM Interim Meeting: Dr. Ehrlich gave a brief presentation addressing concerns that were raised at the Regional Meetings. The Committee determined that this item was developed and proposed it be a Voting Item.

At the 2013 NEWMA Meeting: A comment was heard that these definitions are more than metrology and they also involve field operations. NEWMA supported this proposal as written and recommended that it be a Voting Item.

At the 2013 CWMA Meeting: There were no comments on this item, and it was recommended as a Voting Item.

At the 2013 NCWM Annual Meeting: The Committee recommended the item be presented for a Vote.

Interested parties should contact Dr. Charles Ehrlich (NIST, OWM), at (301) 975-4834 or charles.ehrlich@nist.gov, or contact Ms. Lisa Warfield (NIST, OWM) at (301) 975-3308 or lisa.warfield@nist.gov.

231 NIST HANDBOOK 130 – UNIFORM PACKAGING AND LABELING REGULATION

231-1 W Sections 6.12. Supplementary Quantity Declarations and 6.14. Qualification of Declaration Prohibited

(This item was withdrawn.)

Source:

Central Weights and Measures Association (2011)

Purpose:

Provide clearer language to guide industry and state officials when federal agencies are inconsistent in their interpretations.

Item Under Consideration:

Amend NIST Handbook 130, Uniform Packaging and Labeling Regulation as follows:

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

(Amended 20XX)

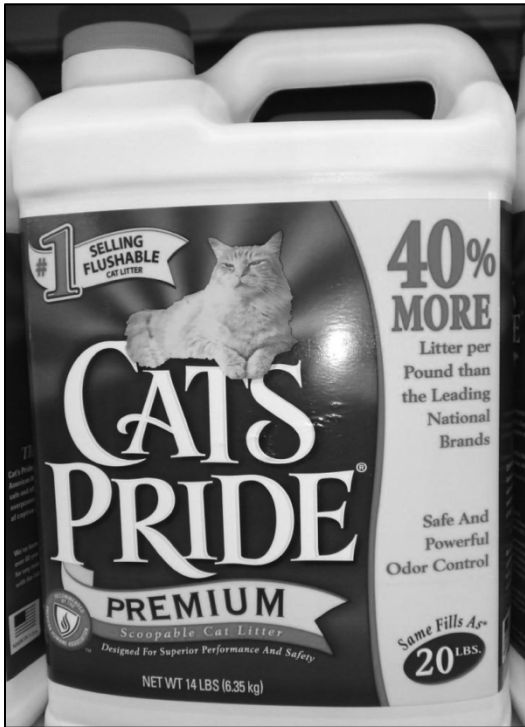
6.14. Qualification of Declaration Prohibited. – In no case shall any declaration of quantity be qualified by the addition of the words “when packed,” “minimum,” or “not less than “equivalent,” or “lasts the same as” or any words of similar import (e.g., “approximately”), nor shall any unit of weight,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

(Amended 1998, Amended 20XX)

Background/Discussion:

Manufacturers are using the terms such as “equivalent” or “lasts the same as” to qualify net weight statements. Clearer language is needed to provide consumers with better information. Industries and state officials need better guidance for product labeling. The Federal Trade Commission (FTC) does not consider the terms “equivalent,” or “lasts the same as” to be exaggerated or misleading.

2010 CWMA Interim Meeting: An official presented an example of a label (below) that was perceived as mislabeled. It was agreed that no conflicting information regarding the net weight statement should be in the lower one-third of the principal display panel. CWMA forwarded the item to NCWM, recommending it as a Voting Item.





2011 NCWM Interim Meeting: It was reported that this language was lifted straight out of the Fair Packaging and Labeling Act (FPLA) and regulators might encounter problems with their investigations if the language is modified. The NIST Technical Advisor commented that the language “lasts the same as” or “equivalent” is in the marketplace, which may be misleading to consumers. The Committee was reminded that the lower 30 % of the principal display panel should be free of supplementary quantity declarations as specified in the Uniform Packaging and Labeling Regulation (UPLR) Section 6.12. Supplementary Quantity Declarations.

The NIST Technical Advisor remarked that the section was amended in 1998 to include the term “approximately” (which is not included in the FPLA) as a prohibited term. There has been no indication that the differences between the UPLR and FPLA are being challenged. It was also recommended that FTC be notified that this is an issue before the Conference. The Committee received a letter from a manufacturer stating that the company will voluntarily remove “lasts the same as” from their package label. The 2011 L&R Committee designated this item as an Informational Item to allow for review and comment by all regions.

2011 NEWMA Annual Meeting: There was a recommendation to obtain additional data from the submitter of the proposal along with clarification from the FTC on their letter dated November 4, 2010 (refer to the *Report of the 96th National Conference on Weights and Measures* [SP 1125, 2011], Appendix A). No additional comments were heard on this item. The NEWMA L&R Committee recommended that this item be Informational.

2011 CWMA Annual Meeting: The submitter of the proposal commented that the terms “last the same as” and “equivalent to” are not quantity statements and should not be in the net quantity of the principle display panel area. The CWMA L&R Committee finds that this will be helpful for enforcement issues and recommended that this item be Informational.

2011 NCWM Annual Meeting: There were no comments heard on this item. The Committee received a letter (refer to the *Report of the 96th National Conference on Weights and Measures* [SP 1125, 2011], Appendix A) from Clorox, stating the term “lasts the same as” is being removed from their packaging. The Committee would like to receive additional input from the fall 2011 regional meetings on this item.

2011 CWMA Interim Meeting: Several officials voiced support of the item and wanted clear cut guidelines for enforcement. Additionally, officials would like to see the FTC follow suit in federal law. One official recommended that the item be referred to the Package and Labeling Subcommittee (PALS). CWMA supports this item and recommends that it be a Voting Item.

2011 WWMA Annual Meeting: There were no comments. The Committee concurs with the FTC findings that the terms are not misleading. The added terms are deemed a quality statement rather than a quantity statement. WWMA recommended that the item be Withdrawn.

2011 NEWMA Interim Meeting: No comments were made and the Committee maintained a neutral position. NEWMA recommended that the item remain as an Informational Item.

2011 SWMA Annual Meeting: There were no comments heard from the floor. The Committee supported the proposal as written. SWMA recommended that the item be a Voting Item.

2012 NCWM Interim Meeting: An industry representative commented that exaggerated and misleading terms need to be addressed. He contends that in the marketplace it is becoming commonplace to see supplemental information appearing on the front of the principal display panel. Mr. Guay, PALS Chair, recommended that PALS develop this item to provide additional guidance. The NCWM L&R Committee designated this item as an Informational Item and assigned its development to PALS.

NEWMA and the CWMA Annual Meetings: Both regions supported the development of this item through PALS. At the CWMA Meeting Mr. Guay remarked that the PALS had just been formed and have not had the opportunity to meet. During the 2012 NCWM Annual Meeting, Mr. Guay provided the Committee with governing principles regarding claims on packages and to develop a series of recommendations regarding best practices for these types of label statements

2012 CWMA Interim Meeting: The NCWM L&R Committee member from the CWMA remarked that PALS was assigned to develop this item by the NCWM L&R Committee. A regulatory official asked the Committee to press forward with this item because problems were growing. CWMA supported this item and recommended that the item remain as an Informational Item and that PALS should address the proposal since compliance issues have been identified.

2012 WWMA Annual Meeting: A regulatory official commented that some terms are “performance” based, but to a quantity statement. PALS Chairman, Mr. Guay recommended that the item be renamed and reworded. The Committee believed the intent of the item is valid; however, after hearing Mr. Guay’s comments it agrees the item needs to be rewritten. The Committee’s concurs with FTC findings that the terms are not misleading. The Committee recommends that PALS continue to work on such issues and once developed PALS should submit a new proposal. WWMA recommended that the item be Withdrawn.

2012 SWMA Annual Meeting: SWMA withheld comment until the PALS reviews the item and makes a recommendation. SMWA recommended that the item be an Informational Item.

2012 NEWMA Interim Meeting: NEWMA recommended that the item be an Informational Item.

2013 NCWM Interim Meeting: Mr. Guay recommended that this item be Withdrawn because they have changed and expanded the scope to include other types of quantity and quality statements. PALS will submit a similar proposal in the future once it is developed. The Committee concurs with PALS and Withdrew this item in its entirety.

2013 CWMA and NEWMA Annual Meetings: Both associations were in support of the Withdrawal of this item. At the 2013 NCWM Annual Meeting no further action was taken by the Committee since the Committee had previously agreed to “Withdraw” the item.

Additional letters, presentations and data may have been part of the Committee's consideration. Please refer to (refer to Appendix A in the *Report of the 96th National Conference on Weights and Measures* [SP 1125, 2011]) to review these documents.

231-2 I Section 10.3. Aerosols and Similar Pressurized Containers

Source:

Commonwealth of Massachusetts Division of Standards (2012)

Purpose:

To allow the quantity statement in terms of weight for packages utilizing the Bag on Valve (BOV) technology where the propellant is not expelled when the valve is activated. NIST Handbook 130, Section 10.3. Aerosols and Similar Pressurized Containers require aerosols and similar pressurized containers that expel the propellant along with the product to disclose the net quantity in terms of weight.

Item Under Consideration:

Amend NIST Handbook 130, Uniform Packaging and Labeling Regulation as follows:

10.3. Aerosols and Similar Pressurized Containers. – The declaration of quantity on an aerosol **package including Bag on Valve (BOV) technology** and **other** similar pressurized packages shall disclose the net quantity of the commodity (including propellant), in terms of weight, that will be expelled when the instructions for use as shown on the container are followed.

Note: Packages that utilize the Bag on Valve (BOV) technology shall be enforceable after month/day/20XX.

(Amended 20XX)

Background/Discussion:

There are a number of products in the marketplace bearing quantity statements in terms of fluid measure that utilize the BOV technology. Packages using BOV technology are non-aerosol by definition because the propellant is not dispensed with the product. Consumers cannot do price and quantity comparison between product packaged using BOV technology and similar product in aerosol packaging because the aerosol packaged product includes the propellant in the net weight and the propellant is dispensed with the product. In the example below, two similar products are pictured, however the one on the left is labeled by net weight, and the one on the right is labeled by liquid measure.



BOV technology is environmentally friendlier because the propellant is not dispensed with the product. Products utilizing the BOV technology only expel the product as the product is contained in a bag which is surrounded by the propellant inside the container. In April 2011, NIST, OWM received a letter supporting labeling of certain products such as the "Pure Citrus" product pictured above by liquid measure.

2011 CWMA Interim Meeting: The Committee agreed that the proposal did not include a specific recommendation for the language for the amendment to NIST Handbook 130, Section 10.3. Aerosols and Similar Pressurized Containers. The Committee did not forward the item to NCWM and recommended that the item be returned to the submitter for Development.

2011 WWMA Annual Meeting: A comment from industry stated there are products in the marketplace that are similar but delivered in a different fashion. This should be looked at to account for new technology in the marketplace. The NIST Technical Advisor read from the NEWMA 2011 Annual Meeting Report that recommends the words “non-aerosol” be printed on the label so that inspectors know to test by fluid measure. The Committee believes there may be some confusion to the different unit pricing units but that consumers will be able to determine that there is new technology to expel the product. BOV technology exists in the marketplace and a proper method of sale is needed. The Committee recommended forwarding the item to NCWM as a Voting Item with the language modifications reflected below:

10.3. Aerosols and Similar Pressurized Containers. – The declaration of quantity on an aerosol package and on a similar pressurized package shall disclose the net quantity of the commodity (including propellant), in terms of weight, that will be expelled when the instructions for use as shown on the container are followed.

10.3.1. Products labeled non Aerosols in Similar Pressurized Containers (Bag on Valve [BOV] – Does not expel propellant with product.) The declaration of quantity shall disclose the net quantity of the commodity in terms of fluid measure.

After the recommendation, additional comments were accepted. An official was troubled with the wording “non-aerosol” and thought the intent of the proposal was to allow people to comparison shop between aerosols and non-aerosols. An official stated that the product could be measured by the liquid. A retired NIST, OWM employee questioned how it was measured. An official wanted to know whether the entire product was expelled when empty. An official stated that this was not ready for status as a Voting Item. The Committee met briefly and changed its recommendation. WWMA forwarded the item to NCWM, recommending it as a Developing Item.

2011 NEWMA Interim Meeting: It was stated that testing for content could be problematic and that marking on the package should be net weight of product only, not including propellant, which is not part of product. The Committee believes there is better comparison of net contents of product being sold if words “NON-AEROSOL PRODUCT” are added to product label. NEWMA forwarded the item to NCWM recommending it as a Voting Item with the following revision: add to the container language “A NON-AEROSOL PRODUCT.”

2011 SWMA Annual Meeting: Concern was expressed by an industry weights and measures consultant over an acceptable test procedure that would be used if volume was permitted. The NIST Technical Advisor noted that no specific language has been proposed and that the UPLR Section 6.4., Terms: Weight, Measures, Volume or Count declares that “any net content statement that does not permit price and quantity comparison is forbidden.” It was further noted that NIST Handbook 130, Section 10.3. Aerosols and Similar Pressurized Containers applies to aerosols and similar pressurized containers. One manufacturer has provided input to this proposal. The National Aerosol Association (NAA) has been contacted for input into this proposal. Preliminary comment by NAA is that BOV technology or versions of it has been around since the 1990s. The NAA Board of Directors member believes BOV technology is considered an aerosol, basing his opinion on a California Air Resources Board Regulation. The SWMA Committee requested that specific language be developed for this item and a complete response from the NAA. They also noted that test procedures will need to be discussed if a volume statement is to be considered. SWMA forwarded the item to NCWM recommending it as a Developing Item.

2012 NCWM Interim Meeting: The Committee reviewed several letters from different manufacturers that use BOV technology recommending liquid volume as the appropriate method of sale for products in BOV style packaging. Concern was expressed that consumers would not be able to make value comparisons if similar items had different units of measure.

Mr. Van Slyke (Lock Lord Bissell & Liddell LLP/Blue Magic, Inc.) provided a presentation indicating that they believe BOV does not fall under the aerosol guidelines. The reasoning is that a BOV container does not expel propellant with the product; therefore, it inherently has less net weight. They believe that consumers do not have sufficient information to know differences between aerosols and BOV products. Mr. Van Slyke recommended two solutions amending the UPLR language as follows:

10.3. Aerosols and Similar Pressurized Containers. – The declaration of quantity on an aerosol package and on a similar pressurized package shall disclose the net quantity of the commodity (including propellant), in

terms of weight, that will be expelled when the instructions for use as shown on the container are followed, **provided however that containers that separate propellant from the expelled product so that propellant is not expelled (such as containers using bag-on-valve technology) may be labeled either with weight or volume of the quantity of the commodity that will be expelled.**

or

10.3. Aerosols and Similar Pressurized Containers. – The declaration of quantity on an aerosol package and on a similar pressurized package shall disclose the net quantity of the commodity (including propellant), in terms of weight, that will be expelled when the instructions for use as shown on the container are followed.

10.3.1 Containers that separate propellant from the expelled product so that the propellant is not expelled (such as containers using bag-on-valve technology) shall be prominently labeled NON-AEROSOL. The declaration of quantity shall disclose the net quantity of the commodity in terms of fluid measure.

Mr. Douglas Raymond (National Aerosol Association [NAA]) gave a presentation reporting the association's position that a container using BOV technology is an aerosol, and its net quantity needs to be declared in terms of net weight. He remarked that BOV has been around for twenty plus years and is not new to the marketplace. Various products are packaged using the BOV technology (e.g., sunscreen, wound washes, shaving cream, and car products). Different aerosol forms use liquid gas, compressed gases, and in barrier forms using Sepro, bladder, and BOV. Mr. Raymond also stated that BOV and non-BOV products are designed to expel their products equally. He stated that classifying a BOV container as a non-aerosol is misleading and a safety concern since this product is pressurized.

A regulatory official agreed that BOV containers should be labeled and tested by net weight. He remarked that test procedures need to be clarified for BOV containers. For example; should the bag be removed from the canister to recover the product?

Concern was also expressed that consumers would be confused if they encountered similar products with different unit pricing and if the products contents are labeled differently. The BOV proposal that was represented during the 2012 NCWM Interim Meeting was based upon the views of the room air fresheners industry only.

The Committee would like to have a better understanding of the variety and type of products in the marketplace and what is under current development. Clarification is needed for the term "similar products" for example, what products meet this classification as defined in NIST Handbook 130, UPLR, Section 10.3. Aerosols and Similar Pressurized Containers. The Committee is also requesting from NIST, OWM clarification on the definition of aerosol and a review for any updates to NIST Handbook 130, Interpretations and Guidelines, Section 2.2.7. Aerosol Packaged Products. The 2012 L&R Committee designated this as an Informational Item.

2012 NEWMA Annual Meeting: There was discussion about conflict between the declaration of content labels in the marketplace between aerosols and bag on valve (BOV) products. NEWMA recommended that the item remain as an Informational Item.

2012 CWMA Annual Meeting: A NIST Technical Advisor stated that the Food and Drug Administration (FDA) compliance department is reviewing to see if there is a conflict with their regulations. NIST has been in contact with the National Aerosol Association (NAA), and they will have a representative at the 2012 NCWM Annual Meeting. The CWMA recommended that the item remain as an Informational Item.

2012 NCWM Annual Meeting: Mr. Douglas Raymond representing the National Aerosol Association (NAA) reported that the association is working with marketers, companies, and other trade associations; and NAA will provide an update on their position on this item at the 2013 NCWM Interim Meeting. The Committee received and reviewed five letters on this matter.

2012 CWMA Interim Meeting: The NCWM L&R Committee Member from the CWMA provided an update. The Committee supported the work of the NAA to recommend consensus language for a definition of aerosol containers and a recommendation for BOV method of sale for the NCWM L&R to consider. CWMA was neutral and recommended that this be an Informational Item.

2012 WWMA Annual Meeting: Industry and regulatory attendees agreed there are a variety of products sold with BOV packaging. Inspectors may have difficulty identifying and testing BOV items if they are not clearly marked and “BOV” on the label. The Committee is unsure on how BOV is defined and believes a test procedure may be needed for BOV packages if they do not follow NIST Handbook 130, UPLR Section 10.3. Aerosols and Similar Pressurized Containers. The Committee would like to hear the updated position from NAA. WWMA recommended that this be an Informational Item.

2012 SWMA Annual Meeting: SWMA withheld comment until NAA presents proposed language with a recommendation at the 2013 NCWM Interim Meeting. SWMA recommended that the item be an Informational Item.

2012 NEWMA Interim Meeting: NEWMA recommended that the item be an Informational Item.

2013 NCWM Interim Meeting: The Committee received and reviewed several letters from BOV manufacturers. The letter from National Aerosol Association (NAA) contained draft language that proposes dual labeling for the method of sale on the product label. The Committee discussed that there is no applicable volumetric test procedure. It was stated that allowing two methods of sales is in opposition of the OIML TC 6 Committee on Prepackaged Products which resolved that aerosols should be declared by weight. The Committee was in agreement that if industry could develop a test procedure they would readdress the issue. The Committee revised the item under consideration to include terminology to include “bag on valve.” The Committee recommends this item be an Informational Item to allow time for manufacturers to provide feedback on the time frame for labeling to change over and to research a volumetric test procedure.

2013 CWMA and NEWMA Annual Meetings: There was no additional information provided. Both regions are recommending this as an Informational Item.

Mr. Hank Pickens (Beaumont) provided a presentation at the 2013 NCWM Annual Meeting describing the procedures and reasoning for BOV to be labeled by volumetric measure. Mr. Pickens opposes NAA’s proposal for BOV to have a dual unit label. Douglas Raymond (National Aerosol Association [NAA]) is in support of a weight statement due to the challenge in testing this product. Mr. Raymond remarked that BOV products can be in liquid, paste, and powder form. A NIST Technical Advisor remarked that a volumetric method of sale would be in conflict with federal law regardless of whether it is an aerosol or not. Mr. David Sefcik (NIST, OWM) has agreed to host a meeting at NIST in Gaithersburg, Maryland, and bring interested federal agencies (i.e., FDA, FTC, and EPA) and stakeholders together. The Committee would like to see the outcome from this meeting that NIST will be hosting.

Additional letters, presentations and data may have been part of the Committee’s consideration. To review the supporting documentation please refer to Appendix B in the *Report of the 96th Annual NCWM Conference* [SP 1125, 2011], Appendix A in the *Report of the 97th National Conference on Weights and Measures* [SP 1160, 2012], and Appendix A of this report (*Report of the 98th National Conference on Weights and Measures* [2013]) to review supporting documentation.

232 NIST HANDBOOK 130 – UNIFORM REGULATION FOR THE METHOD OF SALE OF COMMODITIES

232-1 I Section 2.27. Retail Sales of Natural Gas Sold as a Vehicle Fuel

Source:

Clean Vehicle Education Foundation (2013)

Purpose:

Enable consumers to make cost and fuel economy comparisons between diesel fuel and natural gas.

Item Under Consideration:

Amend NIST Handbook 130, Uniform Regulation for the Method of Sale of Commodities as follows:

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

2.27.1. Definitions.

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

2.27.1.2. Gasoline liter equivalent (GLE). – Gasoline liter equivalent (GLE) means 0.678 kg of compressed natural gas.

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

2.27.1.4. Diesel liter equivalent (DLE). – means **0.756 kg of natural gas.**

2.27.1.5. Diesel gallon equivalent (DGE). – means **2.894 kg (6.38 lb) of natural gas.**

2.27.1.6. Liquefied natural gas – A gaseous fuel composed primarily of methane that has had carbon dioxide removed and nitrogen reduced to 0.5 % by volume and is suitable for liquefaction at –162 °C (–259 °F) and dispensed into a insulated cryogenic fuel storage container(s) for use as an engine fuel.

2.27.1.7. Diesel liter equivalent (DLE). – Diesel liter equivalent means **0.7263 kg of liquefied natural gas.**

2.27.1.8. Diesel gallon equivalent (DGE) – Diesel gallon equivalent means **2.749 kg (6.06 lb) of liquefied natural gas.**

(Amended 20XX)

2.27.2. Method of Retail Sale and Dispenser Labeling.

2.27.2.1. Method of retail sale. – All compressed natural gas kept, offered, or exposed for sale and sold at retail as a vehicle fuel shall be in terms of ~~the gasoline liter equivalent (GLE) or gasoline gallon equivalent (GGE);~~

(a) the gasoline liter equivalent (GLE) or gasoline gallon equivalent (GGE), or

(b) the diesel liter equivalent (DLE) or diesel gallon equivalent (DGE).

(Amended 20XX)

2.27.2.2. Dispenser labeling. – All retail compressed natural gas dispensers shall be labeled with the conversion factor in terms of kilograms or pounds. The label shall be permanently and conspicuously displayed on the face of the dispenser and shall have ~~either the statement “1 Gasoline Liter Equivalent (GLE) is equal to 0.678 kg of Natural Gas” or “1 Gasoline Gallon Equivalent (GGE) is equal to 5.660 lb of Natural Gas” consistent with the method of sale used.;~~

(a) either the statement “One Gasoline Liter Equivalent (GLE) is equal to 0.678 kg of Natural Gas” or “One Gasoline Gallon Equivalent (GGE) is equal to 5.660 lb of Natural Gas” consistent with the method of sale used.

(b) either the statement "One Diesel Liter Equivalent (DLE) is equal to 0.756 kg of Natural Gas" or "1 Diesel Gallon Equivalent (DGE) is equal to 6.312 lb of Natural Gas" consistent with the method of sale used.

(Amended 20XX)

2.27.2.3. Method of retail sale. – All liquefied natural gas kept, offered, or exposed for sale and sold at retail as a vehicle fuel shall be in terms of diesel liter equivalent (DLE) or diesel gallon equivalent (DGE).

(Added 20XX)

2.27.2.4. Dispenser labeling – All retail liquefied natural gas dispensers shall be labeled with the conversion factor in terms of kilograms or pounds. The label shall be permanently and conspicuously displayed on the face of the dispenser and shall have the statement "One Diesel Liter Equivalent (DLE) is equal to 0.7263 kg of Natural Gas" or "One Diesel Gallon Equivalent (DGE) is equal to 6.06 lb of Natural Gas" consistent with the method of sale used.

(Added 20XX)

Background/Discussion:

The gasoline gallon equivalent (GGE) unit was defined by NIST/NCWM in 1994 (refer to Appendix B in this report, *Report of the 98th National Conference on Weights and Measures [2013]*) to allow users of natural gas vehicles to readily compare costs and fuel economy of light-duty natural gas vehicles with equivalent gasoline powered vehicles. For the medium and heavy duty natural gas vehicles in widespread use today, there is a need to officially define a unit (already in widespread use) allowing a comparison of cost and fuel economy with diesel powered vehicles. Also natural gas is sold as a vehicle fuel as either Compressed Natural Gas (CNG) or Liquefied Natural Gas (LNG) and each method of sale is measured in mass. Therefore, the generic term natural gas is proposed to be used in Handbooks 44 and 130 without the existing term "compressed." (The mathematics justifying the specific quantity (mass) of natural gas in a DLE and DGE is included in Appendix B, *Report of the 98th National Conference on Weights and Measures [2013]*.)

The official definition of a DLE and a DGE will likely provide justification for California, Wisconsin, and other states to permit retail sales of LNG for heavy-duty vehicles in these convenient units.

Additional Contacts: Clean Energy, Seal Beach, California, NGV America, Washington, DC, Clean Vehicle Education Foundation, Acworth, Georgia.

2012 CWMA Interim Meeting: A regulatory official commented that there is no standard for Diesel Gallon Equivalent (DGE), LNG and CNG are being sold in Wisconsin and other states as DGE in order to compete with diesel sales. As a result, a standard is urgently needed. DGE sales are occurring in the marketplace without a standard. The Committee recommended that FALS review the conversion factors for DGE and LGE for accuracy. CWMA supported this item and forwarded the item to NCWM recommending it as a Voting Item.

2012 WWMA Annual Meeting: The Committee worked in tandem with the S&T Committee since it had a related item. Ms. Kristin Macey (California) opposed the item because it would cause complications in the marketplace. The Committee believed the item had merit but would like to know whether the values accurately represent the actual value of various types of natural gas products. It acknowledged there are different compositions and sources; for example, LNG has a higher methane composition. Is there a possibility of additional conversion factors based on British Thermal Units (BTUs) from different sources? WWMA forwarded the item to NCWM recommending it as an Informational Item.

2012 SWMA Annual Meeting: An industry representative recommended the item be designated as Developing. A regulatory official questioned why industry is not installing the right equipment rather than putting a label on a nozzle. The Committee recommended that this item be reviewed by the FALS, in part to check the accuracy of the diesel conversion. The Committee also suggested that the 1994 standard for the gasoline gallon equivalent (GGE) be reviewed. SWMA forwarded the item to NCWM, recommending it as an Informational Item.

2012 NEWMA Interim Meeting: NEWMA reviewed the CWMA comments. A General Motors representative indicated that there is a lot of discussion on a point of reference. There was comment that both methods of labeling may be required on a dispenser. The labeling issue may create more confusion for the consumer. NEWMA recommended review by the FALS. NEWMA forwarded the item to NCWM, recommending it as an Informational Item.

2013 NCWM Interim Meeting: A presentation in support of this item was given by Mr. Doug Horne (Clean Vehicle Education Foundation). Several comments were heard regarding the references and databases used to develop the calculations. Concern was expressed with the conversion factors used. Concern was also expressed that the LNG method of sale should be by weight. A NIST, OWM S&T Technical Advisor recommends that L&R and S&T work in a joint session since there is a companion Item 337-1, NIST Handbook 44, *Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices*, Appendix D – Definitions: Diesel Liter and Diesel Gallon Equivalents (DLE, DGE), on the S&T agenda. A collaborative effort between the two Committees will ensure that the proposed equivalent unit is dispensed accurately at the dispenser. Several attendees spoke in support of the collaborative effort. The Committee will request that the NCWM Board of Directors create a Steering Committee that consists of experts and stakeholders to review this proposal. L&R will prepare a list of comments that they would like the Steering Committee to review and address. The L&R Committee recommends this as Informational Item.

At the 2013 NCWM Annual Meeting the Committee was informed that the Natural Gas Steering Committee chaired by Mr. Mahesh Albuquerque would be reviewing this item.

Additional letters, presentations and data may have been part of the Committee's consideration. Please refer to Appendix B, of this document (*Report of the 98th National Conference on Weights and Measures [2013]*) to review these documents.

232-2 I Section 2.33. Oil, 2.33.1.4. Engine Service Category, 2.33.1.4.1. Vehicle or Engine Manufacturer Standard, and 2.33.1.4.1.2. Inactive or Obsolete Service Categories

Source:

Automotive Oil Change Association (AOCA) (2013)

Purpose:

Prevent consumer confusion and government-sponsored product bias regarding legitimate, manufacturer-recommended products, and to prevent installers and retailers from being held responsible for labeling requirements with respect to packaged goods.

Item Under Consideration:

Amend NIST Handbook 130, Uniform Regulation for the Method of Sale of Commodities 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.”

2.33.1.2. Intended Use. – The label on any vehicle engine (motor) oil container shall contain a statement of its intended use in accordance with the latest version of SAE J183, “Engine Oil Performance and Engine Service Classification (Other than “Energy Conserving”).”

2.33.1.3. 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 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.

2.33.1.4. 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 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 ($\frac{1}{8}$ in) in height, as defined by the latest version of SAE J183, “Engine Oil Performance and Engine Service Classification (Other than “Energy Conserving”),” or API Publication 1509, “Engine Oil Licensing and Certification System,” European Automobile Manufacturers Association (ACEA) European Oil Sequences.

2.33.1.4.1. 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 ($\frac{1}{8}$ 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.**

2.33.1.4.1-2. 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, Appendix A, whenever the vehicle engine (motor) oil in the container or in bulk does not meet an active API service category as defined by the latest version of SAE J183, “Engine Oil Performance and Engine Service Classification (Other than “Energy Conserving”).” **If a vehicle engine (motor) oil is identified as only meeting a vehicle or engine manufacturer standard, the labeling requirements in Section 2.33.1.4.1. Vehicle or Engine Manufacturer Standard apply.**

2.33.1.4.5. Tank Trucks or Rail Cars. – Tank trucks, rail cars, and other types of delivery trucks that are used to deliver vehicle engine (motor) oil are not required to display the SAE viscosity grade and service category or categories as long as the bill of lading or other documentation provides that information.

~~All references to invoice or receipt will be enforceable effective on July 1, 2013.~~

(Added 2012) (Amended 20XX)

Background/Discussion:

The vast majority of engine oil used at professional fast lube facilities is the most current category of API (American Petroleum Institute) licensed oil. However, older, specialty, and some non-American vehicles take engine oil not listed as active under API’s private regulatory scheme; some are former API licensed oils now considered “obsolete” or “inactive” and some are simply licensed by another organization like the European Automobile Manufacturers Association (ACEA). However, if original equipment manufacturers (OEM) recommend those engine oils for their vehicles, consumers have a right to use them regardless of API’s blessing, and installers and retailers should be able to sell them without obstruction.

Automotive Oil Change Association (AOCA) amendment is necessary because a cautionary statement appearing on service receipts without explanation will inappropriately mislead consumers with older and uncommon model vehicles into believing they shouldn’t use OEM-recommended engine oil. The average fast lube customer does not recognize API or SAE (Society of Automotive Engineers) to mean anything in particular but “CAUTION” and “OBSOLETE” in big capital letters could only be understood as negative. Scaring consumers in this way will not

only push them to buy more expensive engine oil they do not need but also engender distrust in their installer service providers for recommending and/or using OEM-recommended engine oil.

The average age of cars in the current fleet is nearly 11-years old and it is not unusual for fast lubes to have customers with vehicles twice that age; for example, there are millions of opportunities for consumers to be misled into rejecting proper engine oil. The fact is American consumers are hanging onto their vehicles longer than API is hanging onto its service categories. When API designates a motor oil category as inactive, this does not mean consumers with vehicles designed to use that category turn in their cars or otherwise want to buy a more expensive grade of motor oil going forward. Therefore, a category of motor oil designed to work for particular makes and models of vehicles should not be burdened with the chilling effect of a cautionary statement absent a specific clarification acknowledging the preeminence of the OEM's recommendations.

The new standard phase-in factor must be considered as well. When API publishes a new edition of 1509, *Engine Oil Licensing and Certification Systems*, and/or creates a new service category, a reasonable phase-in period for bulk oil stock is necessary to accommodate older vehicle owners' needs; for example, it may be in those customers' best interests, both functionally and economically, to use motor oil developed in accordance with an earlier edition or service category so long as the automobile manufacturer originally recommended it, and its continued use has no impact on any remaining warranty coverage. Although it is common for API to retain a couple of the most recent service categories as "active," API could choose to make all but the most recent service category "obsolete." For fast lube operators to automatically upgrade bulk oil stock at API-determined intervals would be tantamount to giving API control over the price of oil change services regardless of what the market can bear.

And what about packaged engine oil products already on the shelf or in the distribution chain when API makes a unilateral decision to deactivate an engine oil category? As a practical matter, tens of thousands of retailers and installers cannot re-mark millions of packages to coincide with API's timing or take the financial hit for sending it all back in violation of purchase agreements. Attempting to enforce the labeling requirement at this level would be a nightmare for everyone involved. The way to avoid this problem is to adopt AOCA's amendment so that the requirement for proper labeling of packaged containers of engine oil rest with the party in control of the packaging – the manufacturers.

Without the amendment, the labeling requirement will be very difficult to enforce given the inventory of packaged goods remaining after an active engine oil category has been declared inactive or obsolete.

Fast lubes would experience catastrophic business loss if customers with older and uncommon model vehicles were alienated. Maintenance costs for consumers with older model cars could easily double if they are confused into believing they need the latest category of engine oil.

AOCA contends that the proposed amendment will accomplish three important goals: 1) prevent unintended consumer confusion and product stigma from using a cautionary statement by reestablishing the connection to OEM recommendations; 2) provide the necessary exemption to protect retailers and installers for selling lawful packaged inventory; and 3) which leads to an increase in practical enforcement prospects.

The most analogous regulatory situation to the one at issue in AOCA's proposed amendment is found in the Federal Trade Commissions (FTC) Test Procedures and Labeling Standards for Recycled Oil (16 CFR 311). In that rulemaking process, FTC specifically rejected requiring recycled engine oil to be labeled "recycled" because of the stigma associated with the term at that time (see 72 FR 14410 – 14413 & FN11 [1 H.R. Rep. No. 96-1415, 96th Cong. 2d Sess. 6 (1980), reproduced at 1980 U.S. Code Cong. & Ad. News 4354, 4356. "Oil should be labeled on the basis of performance characteristics and fitness for its intended use, and not on the basis of the origin of the oil."]). The National Automobile Dealers Association (NADA) also commented in favor of this approach: "NADA further stated that by not requiring that "substantially equivalent" recycled oils be labeled "recycled" or "re-refined," used oil processors are able to market their products effectively." (72 FR at 14411) No "recycled" or other potentially derogatory designation is required so long as the finished product meets the appropriate API standard.

2012 CWMA Interim Meeting: AOCA stated that the oil change industry is small businesses without legal staff so they need clear guidance that is easily understood. These businesses follow the OEM recommendations, which recommend oils that do not follow API or SAE standards. The language should acknowledge that some

manufacturers approve and recommend their own oil (i.e., General Motors [GM] and Audi-Volkswagen). AOCA thought that the current language required all OEM oils that did not meet a specific API performance standard to be labeled as obsolete. A GM representative confirmed that GM produces their own oil, Dexos (the best oil for any car), which does not have an API certification. A FALS member shared the API motor oil guide, (refer to Appendix C of this report) which labels specific categories of oil as obsolete. If a manufacturer does not label the oil with an API obsolete category, the product is not considered to be obsolete. OEM manufacturers that were named do not label their oil with an obsolete category, and so oil changers do not need to worry about the obsolete label being used on OEM motor oils. AOCA asked if there would be a grace period to sell product purchased prior to January 2013. States regulators clarified that nothing is written in the regulation, and grace periods would be determined on a state by state basis. AOCA reiterated that the language should clearly state that OEM oils that do not have API certification are not obsolete. She asked that the Committee recommend this clarifying language. AOCA also stated that installers should not be responsible for labeling on packaged products received. A regulatory official stated that retailers in other industries are responsible for labeling on packages received, and it would be an unfair market advantage to allow some retailers to use products that were illegally labeled. Since the current language is not clear about exactly what oils are obsolete, the Committee recommended that FALS make a recommendation at the NCWM Interim Meeting. CWMA forwarded the item to the NCWM recommending it as a Voting Item with the stipulation that FALS develop the language.

2013 CWMA Annual Meeting: Mr. Kevin Ferrick (API) opposed the proposed language for this item; stating if a product meets an obsolete standard the customer deserves to know this. CWMA would like to see additional information from the FALS.

2012 WWMA Annual Meeting: Ms. Kristin Macey (California) opposed the item because it removes retailer accountability. Mr. Ferrick who opposed the additional language also provided a presentation and written comments for the WWMA. Mr. Kurt Floren (Los Angeles County, California) also opposed the item for reasons stated by Ms. Macey. WWMA did not forward the item to NCWM.

2012 SWMA Annual Meeting: An API Representative voiced API's opposition to the item and provided the written testimony in dispute of the comments and claims made by the submitter (refer to Appendix C, in this *Report of the 98th National Conference on Weights and Measures* [2013]).

2012 NEWMA Interim Meeting: API stated it opposes the item and that specifics have been submitted in writing. API suggested this proposal and Item 237-4 be Withdrawn. General Motors indicated the proposal appears to allow older formulations of engine oil, but newer formulations give better performance, even in older vehicles. GM prefers current formulation of engine oil. NEWMA did not forward the item to NCWM.

2013 NEWMA Annual Meeting: Mr. Ferrick indicated that API submitted comments regarding their opposition to this item and requested that this item be Withdrawn. NEWMA would like to see additional information from FALS.

2013 NCWM Interim Meeting: A state opposed this item and would like to see it Withdrawn. The FALS Chairman remarked that there are several engine oils designed for specific model vehicles, and FALS is trying to resolve this issue. A Committee member remarked that a statement of accountability should be within the language. The Committee would like to see additional language developed by FALS and made this an Informational Item.

2013 NCWM Annual Meeting: The FALS submitted modified language for Sections 2.33.1.4. Engine Service Category, 2.33.1.4.1. Vehicle or Engine Manufacturer Standard, and 2.33.1.4.4~~2~~2. Inactive or Obsolete Service Categories. The Committee would like to have regional input on this modified language to review at the 2014 NCWM Interim Meeting.

232-3 V Section 2.33. Oil, 2.33.1.4.5. Tank Trucks or Rail Cars and 2.33.1.6. Documentation

(This item was adopted.)

Source:

Automotive Oil Change Association (2013)

Purpose:

Make compliance and enforcement practical, efficient, and fair.

Item Under Consideration:

Amend NIST Handbook 130, Uniform Regulation for the Method of Sale of Commodities 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 the SAE International’s latest version of SAE J300, “Engine Oil Viscosity Classification.”

2.33.1.2. Intended Use. – The label on any vehicle engine (motor) oil container shall contain a statement of its intended use in accordance with the latest version of SAE J183, “Engine Oil Performance and Engine Service Classification (Other than “Energy Conserving”).”

2.33.1.3. 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 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.

2.33.1.4. 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 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 ($\frac{1}{8}$ in) in height, as defined by the latest version of SAE J183, “Engine Oil Performance and Engine Service Classification (Other than “Energy Conserving”)” or API Publication 1509, “Engine Oil Licensing and Certification System.”

2.33.1.4.1. 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, Appendix A, whenever the vehicle engine (motor) oil in the container or in bulk does not meet an active API service category as defined by the latest version of SAE J183, “Engine Oil Performance and Engine Service Classification (Other than “Energy Conserving”).”

2.33.1.5. Tank Trucks or Rail Cars. – Tank trucks, rail cars, and other types of delivery trucks that are used to deliver vehicle engine (motor) oil are not required to display the SAE viscosity grade and service category or categories ~~as long as the bill of lading or other documentation provides that information on such tank trucks, rail cars, and other types of delivery trucks.~~

2.33.1.6. 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 engine (motor) oil delivered as defined in Section 2.33.1.1. Viscosity; Section 2.33.1.2. Intended Use; Section 2.33.1.3. Brand; Section 2.33.1.4. Engine Service Category; the name and address of the seller and buyer; and the date and time of the sale. For inactive or obsolete service categories, the documentation shall also bear a plainly visible cautionary statement as required in Section 2.33.1.4.1. Inactive or Obsolete Service Categories, documentation must be retained at the retail establishment for a period of not less than one year.

~~All references to invoice or receipt will be enforceable effective on July 1, 2013.~~

(Added 2012) (Amended 2013)

Background/Discussion:

There is a chain of engine oil purchasers involved in the sale of bulk engine oil, all of whom need accurate and adequate information about the commodity so that they can make price and quantity comparisons. The engine oil distributor is a purchaser with respect to engine oil manufacturers, the installer is a purchaser with respect to engine oil distributors, and the consumer is a purchaser with respect to installers. Installers like fast lube operators can only provide accurate and adequate information about bulk engine oil to consumers if their distributors provide it at the point of delivery. It would be manifestly unfair to expect installers to legally vouch in writing for the quality of distributors' engine oil products absent a corresponding written verification requirement.

The original language for consideration (refer to the *Report of the 97th National Conference on Weights and Measures* [SP 1160, 2012], L&R Committee Report) creating a Method of Sale, Section 2.33.1.4.2. Tank Trucks or Rail Cars and Engine Fuels and Automotive Lubricants Regulation Section and 3.13.1.4.2. Tanks Trucks or Rail Cars inadvertently created a loophole for distributors to avoid providing necessary product documentation at the time of delivery.

Whether or not NCWM waives tank truck labeling is not the issue. The problem lies in the controversy this provision allows. If a distributor displays the SAE viscosity grade and service category on a tank truck, then he/she does not have to provide a bill of lading. This poses a serious risk to installers, like fast lubes, because the regulation requires them to vouch for viscosity grade, service category, and brand on customer receipts but doesn't guarantee the installers will receive that same information in writing from their distributors – the parties with actual control over product quality/identity.

There is no practical way for fast lubes or NCWM to enforce this “either/or” regulatory scenario. If a distributor arrives at an installer's facility without documentation, how can the installer hold the distributor to it under NIST Handbook 130? The distributor can simply claim his/her truck is adequately marked. Installers are not professional truck inspectors; they cannot be expected to act as enforcement agents in this scenario. Meanwhile, in order for local weights and measures officials to hold a distributor accountable, they would have to arrive on the scene at the time of delivery, which coincidence is unlikely at best. Any subsequent official inquiry would take place after the distributor has had the opportunity to subsequently mark any unmarked truck at issue. Moreover, risk of distributor failure in providing necessary documentation is high because most do not and never have been willing to provide bills of lading or other documentation to fast lubes at the time of delivery. Additionally, the imperative for any installer labeling and/or receipt information requirements to be matched by corresponding requirements for engine oil distributors includes “brand.” Installers cannot purport to verify via any form of documentation information that distributors have not documented at delivery. Handbook 130 (2013), Uniform Method of Sale, Section 2.33. Oil and Uniform Engine Fuels and Automotive Lubricants Regulation and Section 3.13. Oil required installers to verify brand in writing and; therefore, distributors should be required to verify it too. For NCWM to require otherwise would be manifestly unfair to installers by subjecting them to liability for the bad acts of distributors without any paperwork trail to rely upon in their own defense.

No one has more at stake than installers. Should a product quality problem occur with packaged goods, it is relatively easy to trace the goods back to the manufacturer. However, this is not the case with motor oil transported in bulk; it all looks alike; it may have “changed hands” numerous times before reaching the fast lube facility, and even with testing can be impossible for a fast lube to verify because oil companies use chemical markers that only they can identify. Since motor oil specifications have become so precise, and so expensive, fast lube operators stand to lose thousands of dollars every time a distributor delivers a lesser product.

Moreover, when a distributor delivers the wrong product, it is the fast lube operator who gets stuck holding the bag for consumer claims, which can be excessive if the “wrong” product did or could cause engine damage. It takes weeks before a bad load is detected, which by then anywhere from 500 to 700 customers have been serviced. What is the remedy? All of the customers must be called back and re-serviced for free before any damage has the opportunity to occur. Requiring distributors to provide the same documentation required of installers represents the

minimum necessary step to at least protect installers from misrepresentation claims when a distributor “mis-delivers” bulk oil.

API and Independent Lubricant Manufacturers Association (ILMA) have been publicly quoted as supporting the requirement that distributors provide documentation at delivery as if the new paragraphs at issue already mandate it under all circumstances. See Lube Report (August 1, 2012) www.imakenews.com/lng/e_article002489327.cfm?x=b11,0,w.

The Environmental Protection Agency’s (EPA) Federal Used Oil Management Standards require detailed transporter chain of custody documentation (40 CFR Part 279). See also *EPA’s Chain-of-Custody Procedures for Samples and Data* (www.epa.gov/apti/coc/), which makes clear that failure to maintain a proper chain of custody regarding samples and/or data will destroy any ability to defend oneself if challenged.

According to the USDA, segregation and documentation for specialty (bulk) crops continue from the elevator to the final producer or consumer. (*Traceability in the U.S. Food Supply: Economic Theory and Industry Studies* [USDA Economic Research Service 2004]).

Under the Food and Drug Administration (FDA) Food Modernization Act (Public Law 111-353, www.gpo.gov/fdsys/pkg/PLAW-111publ353/pdf/PLAW-111publ353.pdf), documenting the production and distribution chain of food products is required so that “in case of a problem, a product can be traced back to the source.”

The Department of Transportation (DOT) overlaps with EPA regarding the Federal Hazardous Waste Manifest System (40 CFR Part 262, www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title40/40cfr262_main_02.tpl), which mandates detailed documentation of hazardous waste from cradle to grave; for example, from generator to transporter to end user/disposal.

The submitter provided the following websites as evidence that “mis-delivery of liquid products must happen with some recognized frequency because the subject is big business for the insurance industry.”

- www.johannesagency.com/petroleum
- canalinsurance.com/coverage/truckers-general-liability
- www.marianoagency.com/programs/transportation,
- falcnigno.com/products-a-services/environmentalchemical
- www.iiiaofillinois.org/convention2011/documents/SpeakerOutlines/CGL%20and%20Auto%20Endorsements.pdf
- www.safapeoria.com/data/uploadDirectory/applications/commercialauto/EMPIRE%20FIRE%20AND%20MARINE/Motor%20Carrier/motor%20carrier.pdf
- www.big-ins.com/generalapps/SupplAppFuelMkrs2003.pdf
- www.insurancecommunityuniversity.com/UniversityResources/InsuranceGlossaryFREE/InsuranceGlossaryM/MisdeliveryofLiquidProductsCoverageCommercial.aspx

2012 CWMA Interim Meeting: The Automotive Oil Change Association (AOCA) stated that the current language would allow the distributor to either label the truck or tank car or the bill of lading. The language should clearly state that distributor needs to provide the retailer with a bill of lading or other documentation that includes product identity information. A FALS member acknowledged the current language could be construed to say that the distributor does not need to provide this documentation, and that was not the intent. The Committee recommends that FALS provide concise language that states that a bill of lading or other documentation with appropriate product information must be provided to the retailer. FALS should submit proposed language to the NCWM L&R

Committee for the Interim Meeting. CWMA forwarded the item to NCWM recommending it as a Voting Item with the stipulation that FALS develop the clarifying language as requested.

2012 WWMA Annual Meeting: Mr. Ferrick (API) provided a presentation to the WWMA and written comments to the Committee. Mr. Ferrick remarked that the submitted proposal was rather wordy, however; he does not disagree with the language. Ms. Kristin Macey (California) supported the submitted proposal. The Committee agreed that the submitted proposal is too lengthy and presented alternative language for consideration. The Committee regretted that the submitter was not present to answer questions and concerns. WWMA forwarded the item to NCWM recommending it as an Informational Item as modified and presented below:

2.33.1.5. Tank Trucks or Rail Cars. – Tank trucks, rail cars, and other types of delivery trucks that are used to deliver vehicle engine (motor) oil are not required to display the SAE viscosity grade and service category or categories; **however, as long as** the bill of lading or other documentation **shall** provides that information.

2012 SWMA Annual Meeting: An API representative stated the proposal is consistent with API goals for distributor and installers to disclose what they are installing. The Committee agreed that adequate documentation should be provided. SWMA forwarded the item to NCWM recommending it as a Voting Item.

2013 NCWM Interim Meeting: Mr. Ron Hayes, FALS Chairperson remarked that FALS is recommending language changes for this item. FALS developed Section 2.33.1.6. Documentation, which resolves the issues brought before the Subcommittee. FALS recommended to the Committee that the revised language move forward as a Voting Item. The Committee concurs with the language revisions and proposed this item be a Voting Item.

2013 NEWMA and CWMA Annual Meetings: Both Associations supported this as a Voting Item. During the open hearings at the 2013 NCWM Annual Meeting, the FALS Chair proposed this item move forward as a Voting Item.

232-4 V Section 2.XX. Printer Ink and Toner Cartridges Labeling

(The Committee returned this item to Informational Status.)

Source:

Southern Weights and Measures Association (2010)

Purpose:

Clarify the labeling requirements for industry, consumers and weights and measures officials.

Item Under Consideration:

Amend NIST Handbook 130, Method of Sale Regulation as follows:

2.XX. Printer Ink and Toner Cartridges Labeling.

2.XX.1. Definitions.

- (a) 2.XX.1.1. Printer Ink Cartridges. – Any cartridge or module that contains ink or a similar substance in liquid form employed in the printing and/or copying of documents, papers, pictures, etc., that is used in a printing device and designed to be replaced when no longer able to supply its contents in printing and/or copying.**
- (b) 2.XX.1.2. Toner Cartridges. – Any cartridge or module that contains toner, powder, or similar non-liquid substance employed in the copying or printing of documents, papers, pictures, etc. that is used in a printing and/or copying device and designed to be replaced when no longer able to supply its contents in printing and/or copying.**

2.XX.2. Method of Sale and Labeling.

(a) 2.XX.2.1. Method of sale, printer ink cartridges. – All printer ink cartridges kept, offered, or exposed for sale or sold shall be sold in terms of the count.

(b) 2.XX.2.2. Method of Sale, toner cartridges. – All toner cartridges kept, offered, or exposed for sale or sold shall be sold in terms of the count.

2.XX.3. Yield Disclosure – If the seller discloses the yield of printer ink or toner cartridges on the package, then it shall be measured using the latest version of ISO/IEC printer yield standard on the package offered for prepackaged sale. This information shall be considered a supplemental statement.

Note: Labeling shall be enforceable after month/day/20XX.

(Added 20XX)

Background/Discussion:

Over the past several years, there has been a change in the marketplace on inkjet and toner cartridges net content statements. There is little uniformity, and the Committee has seen some labels with a net content or with only a page yield count (e.g., prints 1000 pages). The NIST, OWM pointed out that, according to guidelines printed in NIST Handbook 130, Weights and Measures Law, Section 19. Information Required on Packages, these products are required to have the net contents of the ink (and toner) labeled, but manufacturers have resisted, claiming an exemption under the FPLA. The purpose of this proposal is to specifically clarify the requirements for industry, consumers, and weights and measures officials.

2009 SWMA Annual Meeting: A Lexmark representative commented that they do not believe that a net content statement should be required, and that a page yield is sufficient. He read the main points of a letter from Lexmark to Mr. Gray (Florida Department of Agriculture and Consumer Services) dated March 17, 2009. The main points within the letter were: 1) the ink associated with a cartridge is a small fraction of the total cost of the print cartridge mechanism; 2) a page yield can provide a meaningful comparison to a consumer if all manufacturers employ the same estimating assumptions and techniques; and 3) International Organization for Standardization (ISO) studied this issue for years and has rejected reliance on ink volume or quantity; instead ISO has developed a yield estimating and claiming methodology that permits cartridges to be compared using a consistent yardstick. Unlike ink volume measurements, page yield measurements provide a consumer with a reliable way to compare the amount of printing that can be expected. Lexmark also stated that ink is expressly exempt from labeling as provided by the FPLA, 16 CFR Part 503.2(a).

An industry representative said this issue does need to be discussed and reviewed further. However, many officials believe that consumers should know what they are getting. If it is determined that page count is the quantity statement, then the page print standard should be reviewed and have tighter standards. Mr. Gray said that more data is needed from manufacturers on this issue. SWMA forwarded the item to NCWM, recommending it as a Developing Item.

2010 NCWM Interim Meeting: Mr. Matthew Barkley (Hewlett Packard Co.) commented that the FPLA creates an exemption for ink which extends to toner and ink cartridges. A declaration of weight and volume are not the best way for consumers to make value comparisons. Customers benefit from page count/yield. Mr. Barkley urged that this issue be Withdrawn. If this issue is to proceed, it should be Informational to allow for a review of the FPLA exemption. He suggested that page yield is widely accepted and has repeatability measures.

Mr. Jeran (Hewlett Packard Co.) submitted a white paper from the Information Technology Industry Council (refer to the *Report of the 96th National Conference on Weights and Measures* [SP 1125, 2011], Appendix C). This white paper included manufacturers from Epson, Hewlett Packard, Kodak, and Lexmark. Mr. Jeran explained that his background is with ink and toner measurement. For the same volume of ink, two different systems of the same model cartridge from two different vendors can print a different number of pages. In order to determine the page yield, they are using the ISO/IEC methodology. ISO is working on a photo yield standard.

An official expressed concerns with page yield being the standard page print for quantity. Variation exists based on the type of cartridge, printer, and font and if graphics/photos are being printed. There is also a concern with what

ink cartridge refillers are doing. The Florida official reviewed the current practice of refillers, and said they are stating the amount of ink on labels. There are many manufactured packages in the marketplace, so value comparison to the Original Equipment Manufacturer (OEM) is critical. This is an expensive commodity and clarifications of the requirements are needed. An official recommended that this item not be Withdrawn, but made Informational to allow time for research. Regulatory officials firmly believe that there needs to be a consistency with the declaration statement on these types of items. A consumer stated that the net content needs to be stated with voluntary supplemental information for page yield. Some voiced their opinion that consumers need to know page yield in order to make a value comparison. The NIST Technical Advisor stated that under the FTC regulations ink and toner cartridges were not part of the CFR. NIST, OWM met with the FTC on February 26, 2010, to request clarification of the exemption. According to the Committee, there needs to be a test procedure for verification of net content developed for ink and toner cartridges. The 2010 L&R Committee designated this item as an Informational Item until they receive clarification from FTC, review ISO standards, and determine what refillers' current practices are.

2010 NEWMA and CWMA Annual Meetings: Both associations received a presentation from Mr. Pociask (American Consumer Institute) regarding a lack of consumer information when purchasing computer printers and cartridges. Both associations expressed that there are still many unanswered questions and would like to hear from manufacturers of printer ink and toner cartridges. Both associations recommended that the item remain as an Informational Item.

2010 NCWM Annual Meeting: Mr. Pociask presented a 2007 study done by his organization with funding by a telemarketing research company. An official expressed concern that the presentation was not clear, and asked if page count is based on certain fills levels or declaring the weight on the cartridge itself. Mr. Pociask responded that Quality Logic uses the ISO standards. He concluded that net weight is easy to enforce. Mr. Pociask stressed that his focus is to provide information that gives consumers useful information in purchasing printers and the life cost of the printer, including printer ink cost.

Another official stated that the study was interesting but would like to hear from manufacturers. There are several issues; cartridges are only for specific printers, when comparing price per page you suggest that price is static, and printer ink cartridge refillers need to be addressed.

Mr. Rosenberg (Information Technology Industry Council) agreed that providing consumers with information is meaningful; however, relevant to the consumer is the number of pages that can print. The ISO standards are a good tool, but will lead to customer confusion. Mr. Rosenberg said that much more discussion is necessary on this issue (refer to the *Report of the 96th National Conference on Weights and Measures* [SP 1125, 2011], Appendix C).

2010 NCWM Annual Meeting: The Board of Directors established a Printer Ink and Toner Cartridge Task Group to review and obtain additional information from all stakeholders. Ms. Dempsey (Montgomery County Weights and Measures, Ohio) was appointed as chair and Ms. Warfield was designated as the NIST Technical Advisor.

2010 CWMA Interim Meeting: Ms. Dempsey, Chair, Printer Ink and Toner Cartridge Task Group on announced her resignation to the association. Ms. Dempsey gave a briefing on this issue, in particular whether this particular form of ink is included in the exemption of the FPLA. It was indicated that Federal Trade Commission (FTC) believes this exemption only applies to ink in pens, not in printer cartridges. Regulators commented that "yield" is more important for cost comparison for consumers; however, other regulators believed that "yield" is not a weights and measures issue. Another concern was that the ISO yields are based upon approximations. Discussion also included whether regulators would have to purchase printers in order to verify yield. It was generally agreed that this is a very complicated matter, and the method of sale needs to be measurable. An official said he asked a manufacturer how the packages are filled. The response indicated that packages are filled by volume. The CWMA Committee supported the efforts of the Printer Ink and Toner Cartridge Task Group to gather more information for development of this proposal. CWMA recommended that the item remain as an Informational Item.

2010 WWMA Annual Meeting and the 2010 NEWMA Interim Meeting: It was announced that NCWM is seeking a chair for the Printer Ink and Toner Cartridge Task Group. WWMA recommended that the item remain as an Information Item.

2010 SWMA Annual Meeting: It was announced that a chair is needed for the Printer Ink and Toner Cartridge Task Group. The Committee did not endorse the formation of the Printer Ink and Toner Cartridge Task Group to resolve this issue. Only within the past couple years have manufacturers changed their declaration statement to read “yield.” Allowing the declaration by yield will open the door for other commodities to change their labeling (e.g., loads of laundry). The SWMA Committee recommended that these commodities be sold by volume and weight; however, they are not opposed to yield being a supplementary statement. This will allow for inspectors to verify the net contents, and also provide information for consumers to make value comparisons. The Committee would like to seek additional information from industry and ink refillers. SWMA recommended that the item be a Voting Item.

2011 NCWM Interim Meeting: The Printer Ink and Toner Cartridge Task Group held its first work session, chaired by Ms. Maureen Henzler (Kansas Department of Agriculture). There was discussion on the current forms and types of printer ink. Industry also explained that they are able to deliver less ink with a better print quality. As a result they refrain from using the net content statement but believe that a page yield is more useful information for a consumer in making comparisons. Industry was informed that yield is not acceptable and they cannot use words like “approximate” and “estimated.” It was agreed that yield could be a supplementary statement on the package. The 2011 L&R Committee designated this item as an Informational Item.

The Printer Ink and Toner Cartridge Task Group requested the following additional information from industry:

1. How does the ISO standard work and how does this standard would fit into the weights and measures test procedure?
2. How is print darkness measured?
3. Why have manufacturers removed the net weight declaration from packages and replaced it with a page yield?
4. When changing formulas, is the toner receptacle resubmitted back through the ISO standards to validate the page print accuracy?

2011 NEWMA Annual Meeting: There were no comments heard on this item. The Committee Chair reminded members that the Printer Ink and Toner Cartridge Task Group will be meeting on the Sunday prior to the start of the NCWM Annual Meeting, and that industry will be giving a presentation. The NEWMA L&R Committee recommended that this item move forward as an Informational Item.

2011 CWMA Annual Meeting: There were several comments heard on this item. Concern was expressed that ink cartridges used to have quantity on the label, but now, in the marketplace, only yield is used for labeling. A state director expressed concern that ink refillers are not being addressed under this proposal. The CWMA L&R Committee recommended that this item move forward as an Informational Item.

2011 NCWM Annual Meeting: The Printer Ink and Toner Cartridge Task Group held a Sunday work session. Several state, county, and city weights and measures officials and members of industry attended. Mr. Josh Rosenberg (Information Technology Industry Council [ITI]), and other printer industry representatives gave a presentation outlining why they believe yield is the appropriate method of sale for their products. They responded to questions regarding the quantity control they have when manufacturing the cartridges. All industry representatives acknowledged in response to questions that their companies have very good quantity control systems in place for filling cartridges. A stakeholder stated that packages must have the weight, measure, or count; no other type of labeling is acceptable. Participants commented that “yield” is not an acceptable means of labeling for any product. The Printer Ink and Toner Cartridge Task Group agreed to meet again at the 2012 NCWM Interim Meeting. The group requested that industry representatives make another presentation at that time that would be limited just to the labeling issue. The Printer Ink and Toner Cartridge Task Group plans to submit a method of sale proposal to the NCWM L&R Committee for a method of sale for packaged printer ink and toner cartridges.

During the Committee open hearings, Mr. Rosenberg (representing Lexmark, HP, Kodak, Epson and Brother), submitted the industry presentation from the Sunday session for the record (refer to Appendix C in the *Report of the*

96th National Conference on Weights and Measures [SP 1125, 2011]). Mr. Rosenberg remarked that quantity declarations by volume or weight do not meet the objectives of his organization nor consumers' preference. He said that yield is the best way to enable consumers to make informed purchase decisions. He believes the ISO standard for yield can be applied to create that data. Mr. Rosenberg stated that industry representatives will attend upcoming regional meetings to address any issues or concerns. A stakeholder noted that he does not believe the ISO yield standard is acceptable, because each manufacturer's default system is different. He also pointed out that NCWM is not a performance based evaluation agency, and encouraged the Task Group to propose the use of weight or volume as the method of sale. The L&R Committee requested that the Printer Ink and Toner Cartridge Task Group continue developing this item.

2011 CWMA Interim Meeting: An official supported the item and asked the Committee to forward it as a Voting Item. Two other officials would rather see a weight statement because the amount of ink would be too small to measure the density. An official opposing a weight statement and supporting measuring by yield stated that one cannot measure when the cartridge retains some portion of ink and measuring by volume does not help inform the consumer. An official questioned how yield could be measured. Several officials stated that yield could be a supplemental declaration and lawsuits could deal with issues related to yield. NCWM may want to consider having the products labeled by weight and not volume. In addition, supplemental information such as yield may be displayed, but not in the net weight area. CWMA recommended that the item remain as an Informational Item.

2011 WWMA Annual Meeting: A consumer stated that no comments have been heard and, therefore, the item is ready to move forward for a vote. An official did not believe that this item was ready to move forward as a Voting Item because of the lack of testing procedure and a recommendation from the Printer Ink and Toner Cartridge Task Group. He then made a motion that this item be made Informational; this motion did not receive a second motion. In a split vote WWMA recommended that the item be a Voting Item.

2011 NEWMA Interim Meeting: No comments were recorded. NEWMA recommended that the item remain as an Informational Item.

2011 SWMA Annual Meeting: No comments were recorded. The Committee supported the item as written. SWMA recommended that the item be a Voting Item.

2012 NCWM Interim Meeting: Ms. Henzler informed the Committee that the Task Group did not have a recommendation on a method of sale for either the ink or toner. They did suggest minor editorial changes to add the word "copying" after the word "printing" or vice versa, throughout the definitions.

Several members of the ink and toner industry recommended that this item be Withdrawn and they have reflected this in letters written to the Committee since this item first appeared. They remarked that the current proposal would confuse and mislead consumers. They believe that consumers are not concerned with the net quantity of ink they are getting, but how many pages they can print. They agreed that the definitions do need additional work. They added that there are other ink technologies in the marketplace such as, wax sticks and oils. Currently wax sticks/crayons are sold by count.

A contractor commented that the Method of Sale Regulation states that items must be sold on the basis of weight, measure, or count. The regulation should be the starting point with the possibility of adding supplementary information. An industry representative commented that they had submitted previous background and documentation on this item. They will continue to work with the Printer Ink and Toner Cartridge Gravimetric Package Testing Task Group.

The Committee believes test procedures need to be developed to test these commodities. In addition, destructive testing of these products can be costly. The Committee wants to look at the possibility for both toner and ink to be sold by weight. Ms. Cardin will request that the NCWM Board of Directors appoint a new work group to develop test procedures and to disband the current Task Group on Printer Ink and Toner Cartridges. The 2012 L&R Committee designated this item as an Informational Item.

2012 NEWMA Annual Meeting: Mr. Floren (Los Angeles County, California) indicated that there is an impasse on Method of Sale and test procedures on these items. The work group is not planning to meet at this time to resolve the issues. NEWMA recommended that the item remain as an Informational Item.

2012 CWMA Annual Meeting: Ms. Cardin gave an overview of this item and provided an update. The Task Group has been formed to focus on test procedures for weight statements on ink and toner cartridges. An industry representative remarked he was supportive of the Task Group's efforts and that an acceptable method of sale would be reached. He also recommended that the Conference get further participation from industry and stakeholders. The Committee recommends that this item be Information.

2012 NCWM Annual Meeting: The new Printer Ink and Toner Cartridge Gravimetric Package Testing Task Group met to discuss a test method that would require industry to label cartridges with a tare (packaged materials) weight. This Task Group, chaired by Ms. Cardin, will continue developing gravimetric test methods for printer ink and toner cartridges, and will provide a report at the 2013 NCWM Interim Meeting. The Committee is placing an item in the 260 Series (NIST Handbook 133) of the next agenda to report the work of the Printer Ink and Toner Cartridge Gravimetric Package Testing Task Group. The L&R Committee will delay further development of this Method of Sale item until the Task Group has completed its recommendations.

2012 CWMA Interim Meeting: The NCWM L&R Committee from the CWMA reported that the Printer Ink and Toner Cartridge Gravimetric Package Testing Task Group is developing test methods for printer ink and toner. CWMA is neutral and recommended that the item remain as an Informational Item.

2012 WWMA Annual Meeting: The Committee noted that the NCWM L&R Committee will not develop this item further until it receives recommendations for gravimetric testing from the Printer Ink and Toner Cartridge Gravimetric Package Testing Task Group. WWMA recommended that the item be Withdrawn.

2012 SWMA Annual Meeting: An industry representative serving on the Printer Ink and Toner Cartridge Gravimetric Package Testing Task Group commented that it is a new group established to develop a test procedure for checking net contents without regard for the method of sale. SWMA supported the Method of Sale proposal as written recommended that the item be a Voting Item.

2012 NEWMA Interim Meeting: NEWMA recommended that the item be an Informational Item.

2013 NCWM Interim Meeting: Judy Cardin (Printer Ink and Toner Cartridge Gravimetric Package Testing Task Group Chair) provided a presentation on the work of the task group (refer to Item 260-3). Ms. Cardin also provided a marketplace survey that reflected "count" was the most common quantity statement being used. Industry was asked about the feasibility of placing the tare weight on cartridges. Their response was that it was not practicable due to cartridge parts being manufactured domestically and internationally and may not always be made of the same material. The presentation also reflected an in-house test using a gravimetric procedure. The Task Group concluded that there is not a practical test procedure and the work group is disbanding. The Committee discussed the results of the task group and reviewed the method of sale language. In conclusion the method of sale language was revised by the L&R Committee to allow for this product to be sold by count. Ms. Lisa Warfield (NIST, OWM) commented that consideration needs to be given to the time manufacturers will need to change over their labeling. The L&R Committee recommended this as a Voting Item.

NEWMA had several representatives that believed "count" was meaningless. A remark was made about "low count" being exempt from count requirements. NIST responded that it would be exempt if written into the requirements. The Federal Trade Commission (FTC) was consulted but did not take a position on the issue. Several attendees speaking as consumers voiced concerns on a yield statement. NIST advised that there are ISO/IEC yield standards. NEWMA recommends the modification to Section XX.2. Method of Sale.

2.XX.2. Method of Sale and Labeling.

2.XX.2.1. Method of sale, printer ink cartridges. – All printer ink cartridges kept, offered, or exposed for sale or sold shall be sold in terms of the count

2.XX.2.2. Method of Sale, toner cartridges. – All toner cartridges kept, offered, or exposed for sale or sold shall be sold in terms of the count

2.XX.3. Yield Disclosure. – **The seller shall disclose the yield of printer ink or toner cartridges as per ISO/IEC 19752, ISO/IEC 19798, ISO/IEC 24711, ISO/IEC 24712 on the package offered for prepackaged sale, or on the receipt for direct sale, or on the transfer document for bulk sale.**

All work has been completed and industry and NCWM L&R are in agreement on the Method of Sale by Count. The proposed modification provides clarity to the consumer when “yield” is questioned. NEWMA recommends the modified language move forward as a Voting Item.

CWMA reviewed the modified language from NEWMA and agrees that count alone is not sufficient and that yield should be considered since it appears to be the best option and solution. It was agreed that weight is the correct solution if a test method could be determined. CWMA recommends that a yield be required and disclosed on the principal display panel of the package, on the receipt for direct sale, or on the transfer document for bulk sale. CWMA recommends with these changes it be a Voting Item.

During the 2013 NCWM Annual Meeting the Committee heard several comments that there may not be a feasible way to label and test this product. Industry believes that consumers are interested in a yield statement when making a purchase. The Committee modified the language in Section 2.XX.3. Yield Disclosure to read as:

2.XX.3. Yield Disclosure. – **If the seller discloses the yield of printer ink or toner cartridges on the package, then it shall be measured using the latest version of ISO/IEC printer yield standard on the package offered for prepackaged sale. This information shall be considered a supplemental statement.**

The Committee moved this item to an Informational for a review of the amended language at the Fall Regional Association Meetings.

Additional letters, presentations, and data may have been part of the Committee’s consideration. Please refer to Appendix C in the *Report of the 97th National Conference on Weights and Measures* (SP 1160, 2012) to review these documents.

232-5 V Section 2.XX. Retail Sale of Electricity/Vehicle

(This item was adopted.)

Source:

National Institute of Standards and Technology, Office of Weights and Measures (2012)

Purpose:

Create a Developing Item to engage the weights and measures community in creating a method of sale to support uniformity in retail sales of electricity as vehicle fuel.

Item Under Consideration:

2.XX. Retail Sales of Electricity Sold as a Vehicle Fuel.

2.XX.1. Definitions.

2.XX.1.1. Electricity sold as vehicle fuel. – **Electrical energy transferred to and/or stored onboard an electric vehicle primarily for the purpose of propulsion.**

2.XX.1.2. Electric vehicle supply equipment (EVSE). – **The conductors, including the ungrounded, grounded, and equipment grounding conductors; the electric vehicle connectors; attachment plugs;**

and all other fittings, devices, power outlets, or apparatuses installed specifically for the purpose of measuring, delivering, and computing the price of electrical energy delivered to the electric vehicle.

2.XX.1.3. Fixed service. – Service that continuously provides the nominal power that is possible with the equipment as it is installed

2.XX.1.4. Variable service. – Service that may be controlled resulting in periods of reduced, and/or interrupted transfer of electrical energy.

2.XX.1.5. Nominal Power. – Refers to the “intended” or “named” or “stated” as opposed to “actual” rate of transfer of electrical energy (i.e., power).

2.XX.2. Method of Retail Sale. – All electrical energy kept, offered, or exposed for sale and sold at retail as a vehicle fuel shall be in units in terms of the megajoule (MJ) or kilowatt-hour (kWh). In addition to the fee assessed for the quantity of electrical energy sold, fees may be assessed for other services; such fees may be based on time measurement and/or a fixed fee.

2.XX.3. Retail Electric Vehicle Supply Equipment (EVSE) Labeling.

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

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

- (1) the level of EV Service expressed as the nominal power transfer (i.e., nominal rate of electrical energy transfer), and
- (2) the type of electrical energy transfer (e.g., AC, DC, wireless).

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

- (1) the type of service (i.e., “Variable”);
- (2) the minimum and maximum power transfer that can occur during a transaction, including whether service can be reduced to zero;
- (3) the conditions under which variations in electrical energy transfer will occur; and
- (4) the type of electrical energy transfer (e.g., AC, DC, wireless).

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

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

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

2.XX.4. Street Sign Prices and Other Advertisements.

Where electrical energy unit price information is presented on street signs or in advertising other than on the EVSE:

- (a) The electrical energy unit price shall be in terms of price per megajoule (MJ) or kilowatt-hour (kWh) in whole cents (e.g., \$0.12) or tenths of one cent (e.g., \$0.119). In cases where the electrical energy is unlimited or free of charge, this fact shall be clearly indicated in place of the unit price.**
- (b) In cases where more than one electrical energy unit price may apply over the duration of a single transaction to sales to the general public, the terms and conditions that will determine each unit price and when each unit price will apply shall be clearly displayed.**
- (c) For fixed service applications, the following information shall be conspicuously displayed or posted:**
 - (1) the level of EV Service expressed as the nominal power transfer (i.e., nominal rate of electrical energy transfer), and**
 - (2) the type of electrical energy transfer (e.g., AC, DC, wireless).**
- (d) For variable service applications, the following information shall be conspicuously displayed or posted:**
 - (1) the type of delivery (i.e., “Variable”);**
 - (2) the minimum and maximum power transfer that can occur during a transaction, including whether service can be reduced to zero;**
 - (3) the conditions under which variations in electrical energy transfer will occur; and**
 - (4) the type of electrical energy transfer (e.g., AC, DC, wireless).**

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

(Added 2013)

Background/Discussion:

Significant work is needed to gather and incorporate all available input from stakeholders including device manufacturers, public utility commissions, weights and measures officials, smart grid experts, and all others that are in a position to contribute to the development of a method of sale for electricity as vehicle fuel. Thus, it is recommended that this item be taken up as a Developing Item to encourage input from stakeholders and experts in the development of proposed definitions, method of sale requirements, retail equipment price posting and labeling requirements, and any other elements needed to advance the item for adoption.

While a specific proposal for consideration has yet to be developed, some preliminary examples and points to consider are offered below:

2.XX.1. Definitions.

- (a) Electric Vehicle or Hybrid-Electric Vehicle.** – A vehicle that employs electrical energy as a primary or secondary mode of propulsion.
- (b) Plug-in Electric Vehicle (PEV).** – An electric vehicle that has onboard electrical energy storage designed to be charged via a physical connection to an external source of electrical energy.
- (c) Electricity as Vehicle Fuel.** – Electrical energy transferred to and/or stored onboard an electric vehicle primarily for the purpose of propulsion.

(d) Electric Vehicle Supply Equipment (EVSE). – A device or system used to transfer electrical energy to an electric vehicle, either as charge transferred via physical or wireless connection, by loading a fully charged battery, or by other means.

2.XX.2. Method of Retail Sale and Supply Equipment Labeling. – Preliminary review suggests that the method of sale should be based on metered quantities to facilitate value comparison by consumers. The units should be specified for all electrical energy kept, offered, or exposed for sale and sold at retail as vehicle fuel, such as electrical energy units in terms of kilowatt hours (kWh) and/or in the metric equivalent unit for electrical energy Joules (J).

2.XX.3. Retail Service Equipment Labeling. – The unit price on the basis of the method of sale will be important to consumers as a basis for a value comparison regardless of whether the electrical energy is delivered through a slow plug-in charging device, a fast charging device, or by battery replacement.

2.XX.4. Presentation of Price (Street Signs and Advertisements). – The unit price according to method of sale will be important to clearly represent on street signs and advertisements when a consumer must make a value comparison before pulling their vehicle into a station to purchase electrical energy.

Although many Plug-in Electric Vehicle (PEVs) are primarily charged in homes and at work, it is projected that there will be a growing need for public PEV charging stations in order to address public expectations and allow for successful adoption of PEV technology by the public. Several states have observed emergence of PEVs and made inquiries regarding direction of NCWM toward a method of sale for electricity as a vehicle fuel. One online resource for locating charging stations at https://na.chargepoint.com/charge_point identifies nearly 1100 charging stations already deployed across the United States. Use of electric vehicles and hybrid-electric vehicles is increasing. Adoption of electric vehicles is being driven by a number of factors, including high traditional fuel prices, auto industry investment in PEV technology, government investment and subsidies, national fuel economy standards, and state and national zero-emission vehicle and greenhouse gas standards.

A single, consistent method of sale is needed to pave the way for accurate measurement and representation of quantities sold and to facilitate value comparison by consumers. The method of sale is a crucial element that must be in place before the suitability of measurement methods and device technologies can be assessed. A measurement that is accurate, consistent, and understandable will promote consumer confidence and will provide consumers with a fundamental tool to perform value comparisons and protect themselves from confusion and fraud. An electrical energy-based method of sale would accomplish this.

Other methods of publicly offering electrical energy for sale as vehicle fuel have appeared in the absence of a nationally standardized method of sale. These include time-based charges, subscriber access, and gratis (free of charge) access. The coexistence of multiple methods of sale for the same commodity frustrates consumers' efforts to make informed value comparisons.

The actual value to a motorist of the electrical energy that is received during charging is in terms of the distance that they are able to travel. The increase in the distance traveled after receiving a charge is dependent on the amount of electrical energy that was delivered during the charging event. The amount of charge the vehicle receives during a charging event cannot be determined solely by measuring the time it was connected to the charging system. The rate per time the charge is delivered will depend on many factors that cannot be controlled including, but not limited to, the starting charge level, the design of the vehicle battery, the type of charging equipment, and other environmental variables. For these reasons, a time based method of sale will not form a sound basis for a consistent value comparison and an electrical energy-based method of sale is strongly recommended.

The current equipment for vehicle charging that is available in the marketplace today represents a very wide range of charging speeds, further emphasizing the need for a single method of sale. Level 1 equipment charges vehicles with 110 VAC and can take from 8 hours to 12 hours to fully charge a vehicle. In contrast, a fast DC type of Electric Vehicle Supply Equipment (EVSE) is capable of charging a vehicle from 20 % to 80 % of full charge in 10 minutes, closely approximating the time of a traditional liquid (e.g., gasoline) vehicle fueling cycle. Consumers place a high value on their time; therefore, it is reasonable to expect that the unit price for electrical energy from a device capable of very fast charging will be higher. This can also be anticipated because the equipment capable of

faster charging represents a higher capital investment. Since stations may offer multiple options for charging speed, a uniform language for describing the type of charging equipment available by providers should be developed so that this important aspect of consumer value can be presented consistently in conjunction with the unit price to aid in the value comparison.

Vehicle charging using types of EVSE that offer slower charging rates is often offered in conjunction with other paid services (e.g., parking, valet parking, routine vehicle maintenance). In these cases, the unit price for electrical energy offered should be presented separately from any price for the other paid service(s) to allow for a value comparison with the cost of electrical energy offered by other providers.

For reference, a typical PEV can hold a charge of 24 kWh in onboard storage, with some vehicles capable of holding as high as 75 kWh. The average price of electrical energy in the United States is \$0.075 per kWh and the average price for residential electrical energy is \$0.089 per kWh. Presuming that the price for electrical energy as a vehicle fuel might range from \$0.10 kWh to \$0.50 per kWh (perhaps depending on the speed of the ESVE charger), then the cost to the consumer to fill a vehicle might range from \$2.40 to as high as \$37.50.

An additional issue that needs to be explored and developed is that of “battery exchanges.” Equipment already exists that allows consumers to swap a depleted storage device for a fully charged onboard storage device (i.e., battery). In this case, the amount of charge present in the fully charged device should be communicated to the consumer consistent with the method of sale to enable a value comparison between this method and plug-in ESVE charging. The issue of whether and how to credit a consumer for the amount of charge that exists in the battery that is to be removed should be considered as this item develops.

There are currently as many as eight manufacturers of EVSE that would benefit from clear direction on method of sale and device standards.

The National Association of Regulatory Utility Commissioners (NARUC) and other local Public Utility Commissions (PUC) interests have identified PEV use, and particularly public re-charging use cases, as having potentially significant impact on Public Utility efficiency, infrastructure needs, and pricing structures. Collaboration with these organizations in the development of national legal metrology standards for electrical energy sold as vehicle fuel would offer an opportunity for the creation and implementation of standards that take into consideration the missions of both NARUC and NCWM.

There is a likelihood that stations owned and operated by public utilities will coexist with privately owned charging stations. There may be regulatory issues in some jurisdictions that effect price regulation and competitiveness between these two types of stations. This is another reason that NARUC and PUC input is critically needed on development of a method of sale.

In *Comments of the Division of Ratepayer Advocates to the California PUC* (see Section II.A www.dra.ca.gov/NR/rdonlyres/B2E02349-740A-4EA8-A4D0-69ED3C0D6623/0/R0908009DRACComments_A1b.pdf), the question has also been raised as to whether PUCs may require residential customers to install a separate electric sub-meter for PEV charging. If this occurs, it is most likely that consumers would be invoiced for charging their vehicles at home in the same kWh units that are used for their primary billing. If the method of sale at public charging stations matches the units that are billed for charging the same vehicle at the residence, this will further facilitate the value comparison by consumers.

In some states, electrical energy sub-metering already falls under the jurisdiction of state and local weights and measures authorities. These jurisdictions must now use established standards other than NIST Handbook 44 and NIST Handbook 130. National standards for the sale of electrical energy in NIST Handbook 44 and NIST Handbook 130 would promote greater uniformity on sub-metering applications.

2011 CWMA Interim Meeting: An official suggested referencing FTC for labeling on alternative fuels. CWMA did not forward the item to NCWM and recommended returning the item to the submitter for development.

2011 WWMA Annual Meeting: An official commented that such vehicles already exist and there is no need for this matter to be addressed by NCWM. The Committee acknowledged that new technology is in the marketplace and encouraged NCWM to develop a method of sale for electricity as a vehicle fuel. WWMA forwarded the item to NCWM, recommending it as a Developing Item.

2011 NEWMA Interim Meeting: An official questioned how consumers will be charged, how the effort will be monitored, and whether this would be considered a regulated utility. NEWMA forwarded the item to NCWM, recommending it as a Developing Item.

2011 SWMA Annual Meeting: An official asked for clarification regarding the definition of an electric or hybrid electric vehicle. A NIST Technical Advisor noted that there is an absence of a clearly defined method of sale. Inquiries regarding the correct method of sale have increased as growth in charging stations have grown. The Technical Advisor asked that this item be made Developing because much information needs to be gathered. A couple of officials responded that only their utility companies can sell electricity. It was recognized that public utilities need to be an integral part of the process. An official questioned whether a measuring device for electricity exists today, and whether it was National Type Evaluation Program certified. There was also a question as to whether a test measure can be traceable and certifiable to a standard. An official expressed support for this item. SWMA forwarded the item to NCWM recommending it as a Developing Item.

2012 NCWM Interim Meeting: Concern was expressed with the definitions for primary and secondary and that the item only deals with vehicle fuel. At this time, there is no proposal under consideration, and the language under the area "background/discussion" is to be considered. The NIST Technical Advisor remarked that NIST, OWM is gathering data and information from many resources. Eventually a work group will be formed to further develop this item. The Committee designated this item as a Developing Item.

2012 NEWMA Annual Meeting: An attendee commented that these devices are not utility meters; they are subsidiary meters that fall under weights and measures authority. Another attendee voiced support as a developing item because businesses are installing these sub-meters and a uniform method of sale is needed. NEWMA recommended that the item remain as a Developing Item.

2012 CWMA Annual Meeting: A regulatory official remarked that this is not a public utility and owners of these charging units make free market sales. States should be concerned that this is a rapidly growing market without any standard. Other states commented; one stating that charging stations are selling by time, not kilowatt hour and the other stating that the charging stations are a free service for now. A regulatory official remarked that there are quick and slow charging stations and recommended that consumers be charged on what the vehicle is capable of receiving rather than what the device is capable of delivering. CWMA recommended that the item remain as a Developing Item.

2012 NCWM Annual Meeting: NIST, OWM announced that a NIST work group has been formed to develop this item and there are two meetings schedule over the next several months. A preliminary draft code has been developed, which closely follows the California standard. Two regulatory officials expressed urgency in developing this proposal.

2012 WWMA Annual Meeting: Ms. Kristin Macey (California) supported the item, stating that regulations would provide clear authority in the marketplace. Ms. Macey also reminded the states to look at their signage laws to see if there is an impact. Ms. Juana Williams, NIST Technical Advisor and Chair of the Electric Vehicle Fueling and Submetering (EVF&S) Work Group (WG) reported that they held their first web-based meeting on August 29, 2012. They covered the structure and goals of the WG and membership status (active or observer) of each attendee was established. The next meeting will be held in person at NIST in Gaithersburg, Maryland, with an option to attend via webinar at a date to be determined in December 2012 or January 2013. The group will discuss technical issues for the first time at this next meeting. NIST has provided the work group with draft proposals for a new Handbook 44 code and a draft NIST Handbook 130 method of sale. The draft code will be starting points as the group fully develops these two items. WWMA recommended that the item remain as a Developing Item.

2012 SWMA Annual Meeting: SWMA recommended that the item be an Informational Item.

2012 NEWMA Interim Meeting: NEWMA members again expressed urgency for a final product on the topic. This should be given a higher priority by the WG as more charging stations are appearing without specific guidance on method of sale placing the consumer at a disadvantage.

2013 NCWM Interim Meeting: Ms. Williams provided the Committee with a status report and the latest language for consideration of the findings of the WG. Ms. Williams also remarked that the WG would like to see this item move forward as a Voting Item. Several states voiced support for this item and encouraged regulators to be active with this WG. The L&R Committee is recommending this move forward as a Voting Item. The CWMA and NEWMA agree that this item clarifies the Method of Sale for Retail Sale. This will allow the S&T Committee to work with stakeholders and regulators to develop test procedures.

2013 NCWM Annual Meeting: EVFS Chair, Ms. Williams gave a briefing on the status of the EVF&S WG meeting held at NIST in Gaithersburg, Maryland, on June 11, 2013. Mr. Jim Creevy (NEMA) and a member of the EVF&S WG submitted language that was developed by the WG on June 11, 2013, (refer to Appendix D in this report, *Report of the 98th National Conference on Weights and Measures* [2013]). However, there was no consensus between industry and regulators on this specific language. The Committee proposed the language under the Item Under Consideration move forward as a Voting Item.

If you are interested in assisting with the development of this item please contact, Ms. Juana Williams (NIST, OWM), Chairperson for the Electric Vehicle Fueling and Submetering Work Group at (301) 975-3989 or juana.williams@nist.gov.

232-6 I Section 2.30. ~~E85 Fuel Ethanol Flex Fuel Blends~~

Source:

Fuels and Lubricants Subcommittee Task Group (2012)

Purpose:

Update regulations related to flex fuels.

Item Under Consideration:

Uniform Regulation for the Method of Sale of Commodities

2.30. ~~E85 Fuel Ethanol Flex Fuel Blends.~~

2.30.1. How to Identify ~~Fuel Ethanol Flex Fuel Blends.~~ – ~~Fuel Ethanol Flex Fuel Blends~~ shall be identified as Ethanol Flex Fuel or EXX Flex Fuel ~~E85.~~

2.30.2. Labeling Requirements.

(a) Ethanol Flex Fuel blends with an ethanol concentration no less than 51 and no greater than 83 volume percent shall be labeled “Ethanol Flex Fuel, minimum 51 % ethanol”. ~~Fuel ethanol shall be labeled with its automotive fuel rating in accordance with 16 Code of Federal Regulations Part 306.~~

(b) Ethanol Flex Fuel blends with an ethanol concentration less than or equal to 50 volume percent shall be labeled “EXX Flex Fuel, minimum YY % ethanol”, where the XX is the target ethanol concentration in volume percent and YY is XX minus 5. The actual ethanol concentration of the blend shall be XX volume percent plus or minus 5 volume percent.

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

states, **“CHECK OWNER’S MANUAL”, in 20 point font “Consult Vehicle Manufacturer Fuel Recommendations,” and shall not be less than 6 mm (¼ in) in height by 0.8 mm (1/32 in) stroke; block style letters** and the color shall be in definite contrast to the background color to which it is applied.

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

Background/Discussion:

The current wording in NIST Handbook 130 related to fuels restricted to use in Flex Fuel Vehicles should be reviewed. Input gathered from the regional meetings and other stakeholders will be used by FALS to develop recommended modifications to NIST Handbook 130.

2013 NCWM Annual Meeting: Mr. Chuck Corr, Chair of the task group under FALS provided initial language changes for a Section 2.30. ~~E85 Fuel~~ Ethanol Flex Fuel Blends. There is additional work being done by this task group under the L&R Committee Item 237-9.

237 NIST HANDBOOK 130 – UNIFORM ENGINE FUELS AND AUTOMOTIVE LUBRICANTS REGULATION

237-1 I Section 1. Definitions – Diesel Liter Equivalent (DLE) and Diesel Gallon Equivalent (DGE)

Source:

Clean Vehicle Education Foundation (2013)

Purpose:

Enable consumers to make cost and fuel economy comparisons between diesel fuel and natural gas.

Item Under Consideration:

Amend NIST Handbook 130, Engine Fuels and Automotive Lubricants Regulation as follows.

Section 1. Definitions

1.XX. Diesel Liter Equivalent (DLE). – means 0.756 kg of natural gas.

(Added 20XX)

1.XX. Diesel Gallon Equivalent (DGE). – means 2.863 kg (6.312 lb) of natural gas.

(Added 20XX)

Background/Discussion:

The gasoline gallon equivalent (GGE) unit was defined by NIST/NCWM in 1994 (refer to Appendix B in this report, *Report of the 98th National Conference on Weights and Measures* [2013]) to allow users of natural gas vehicles to readily compare costs and fuel economy of light-duty natural gas vehicles with equivalent gasoline powered vehicles. For the medium and heavy duty natural gas vehicles in widespread use today, there is a need to officially define a unit (already in widespread use) allowing a comparison of cost and fuel economy with diesel powered vehicles. Also, natural gas is sold as a vehicle fuel as either Compressed Natural Gas (CNG) or Liquefied Natural Gas (LNG) and each method of sale in measure in mass. Therefore, the generic term for natural gas is proposed to be used in NIST Handbooks 44 and 130 without the existing term "compressed." The mathematics justifying the specific quantity (mass) of natural gas in a DLE and DGE is included in Appendix B of this report (*Report of the 98th National Conference on Weights and Measures* [2013]).

The official definition of a DLE and a DGE will likely provide justification for California, Wisconsin, and any other state to permit retail sales of LNG for heavy-duty vehicles in these convenient units.

2012 CWMA Interim Meeting: A regulatory official commented that there is no standard for Diesel Gallon Equivalent (DGE), and LNG and CNG are being sold in Wisconsin and other states as DGE in order to compete with diesel sales. As a result, a standard is urgently needed. DGE sales are occurring in the marketplace without a standard. The Committee recommended that FALS review the conversion factors for DGE and LGE for accuracy. CWMA supported this item and forwarded the item to NCWM, recommending it as a Voting Item.

2012 WWMA Annual Meeting: The Committee worked in tandem with the S&T Committee since it had a related item. Ms. Kristin Macey (California) opposed the item because it would cause complications in the marketplace. The Committee believed the item had merit but would like to know whether the values accurately represent the actual value of various types of natural gas products. It acknowledged there are different compositions and sources; for example, LNG has a higher methane composition. Is there also a possibility of additional conversion factors based on BTUs from different sources? The Committee requested outreach by NCWM to other stakeholders to get their involvement on these items. WWMA forwarded the item to NCWM recommending it as an Informational Item.

2012 SWMA Annual Meeting: SWMA recommends review by the Fuels and Lubricants Subcommittee and forwarded the item to NCWM recommending it as an Informational Item.

2012 NEWMA Interim Meeting: NEWMA reviewed the CWMA comments. A General Motors representative indicated that there is a lot of discussion on a point of reference. There was comment that both methods of labeling may be required on a dispenser. The labeling issue may create more confusion for the consumer. NEWMA recommended review by the Fuels and Lubricants Subcommittee (FALS). NEWMA forwarded the item to NCWM recommending it as an Informational Item.

2013 NCWM Interim Meeting: A presentation in support of this item was given by Mr. Doug Horne (Clean Vehicle Education Foundation). Several comments were heard regarding the references and databases used to develop the calculations. Concern was expressed with the conversion factors used. A NIST S&T Technical Advisor recommends that L&R and S&T Committees work in a joint session since there is a companion Item 337-1 on the S&T agenda. A collaborative effort between the L&R and S&T Committees will ensure that the proposed equivalent unit is dispensed accurately at the dispenser. Several attendees spoke in support of the collaborative effort. The Committee will request the NCWM Board of Directors create a steering committee that consists of experts and stakeholders to review this proposal. L&R Committee will prepare a list of comments that they would like the Steering Committee to review and address. The L&R Committee recommends this as Informational Item.

2013 NCWM Annual Meeting: The Committee was informed the Natural Gas Steering Committee chaired by Mr. Mahesh Albuquerque would be reviewing this item.

Refer to Appendix B in this report (*Report of the 98th National Conference on Weights and Measures [2013]*) for additional letters, presentations, and data that were part of the Committee's consideration.

Additional Contacts: Clean Energy, Seal Beach, California, NGVAmerica, Washington, DC, Clean Vehicle Education Foundation, Acworth, Georgia

237-2 I Sections 2.1.3. Minimum Antiknock Index (AKI), Section 2.1.4. Minimum Motor Octane Number, and Section 3.2.5. Prohibition of Terms – Table 1.

Source:

General Motors (2013)

Purpose:

Remove obsolete Altitude De-rating of Octane practice, establish a National Octane Baseline, and harmonize Octane Labeling from state to state.

Item Under Consideration:

Amend the NIST Handbook 130, Engine Fuels and Automotive Lubricants Regulation as follows:

2.1.3. Minimum Antiknock Index (AKI). – The AKI of gasoline and gasoline-oxygenate blends shall not be less than 87. The AKI shall not be less than the AKI posted on the product dispenser or as certified on the invoice, bill of lading, shipping paper, or other documentation.

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

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

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

(Table 1. Amended 1997 and 20XX)

Background/Discussion:

These NIST Handbook 130 octane changes will harmonize with an effort underway in the ASTM International (ASTM) Gasoline and Oxygenates Subcommittee to include a minimum motor octane number (MON) performance limit in gasoline. The naming of the various octanes is a function for weights and measures.

Nominally, vehicles manufactured after 1984 include engine computer controls maintaining optimal performance while using gasoline octane of 87 AKI or higher. The practice of altitude de-rating of octane, resulting in octanes below 87 AKI, reduces a vehicle’s efficiency and fuel economy. Increasingly, more vehicles are boosted (turbocharged/supercharged) eliminating altitude intake air effects. Additionally, consumers using gasoline with an octane AKI below 87 will void their vehicle owner’s warranty. The Coordinating Research Council (CRC) Report No. 660, “Fuel Anti-knock Quality – Engine Response to RON (Research Octane Number) versus MON,” May 2011 demonstrates the continued need for gasoline MON octane for the large bored, naturally aspirated U.S. engines. Setting an 82 MON minimum maintains the current MON level for today’s 87 AKI Regular Unleaded gasoline. A common U.S. octane specification between ASTM, NCWM, and Vehicle Owners Manuals will give states clear direction on how best to enforce proper fuel pump octane labeling and quality levels on behalf of vehicle consumers.

Leaded gasoline is not available at retail and, therefore, labeling guidance is not needed.

Mr. Bill Studzinski (General Motors) gave a presentation at the 2012 CWMA Interim Meeting. He stated there is no minimum AKI specification in NIST Handbook 130. NCWM wants to align ASTM D4814 with NIST Handbook 130, but there is no minimum in ASTM D4814 and ASTM is looking at this. Less than 1 % of vehicles on the road today are 1984 or prior. All vehicle owner’s manuals stipulate 87 octane or higher. Using 85 octane in these vehicles causes slight reductions in efficiency and fuel economy. There should be harmonization between vehicles owner’s manuals, NCWM, and ASTM. The minimum AKI should be 87 and the minimum MON should be 82. Minimum octane of 87 is really an ASTM issue. A regulatory official believed that if we adopted this language it would provide the states with appropriate octane levels. The resource for octane is small, but currently OEMs are manufacturing for all vehicles to tolerate this fuel. A Renewable Fuels Association representative commented that state regulators who are with NCWM regulate octane, and NCWM should have the standards and

not wait for ASTM. CWMA supports this item and forwarded the item to NCWM recommending it as a Voting Item. At the 2013 CWMA Annual Meeting, the Committee recommended this remain an Informational Item pending the outcome of the June 2013 ASTM ballot that is related to octane.

Mr. Studzinski provided a presentation at the 2012 WWMA Annual Meeting. The Committee would like to have ASTM and FALS work in tandem to develop a proposal that provides a phase out period. The Committee recommended a modification to the proposal to allow for the Table 1. Minimum Antiknock Index Requirements chart to remain with Section 3.2.5. Prohibition of Terms. WWMA forwarded the item to NCWM recommending it as an Informational Item as modified and presented as follows:

2.1.4. Minimum Antiknock Index (AKI). – The AKI of gasoline and gasoline-oxygenate blends shall not be less than 87. The AKI shall not be less than the AKI posted on the product dispenser or as certified on the invoice, bill of lading, shipping paper, or other documentation.

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

(Amended 2009 and 20XX)

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

(Amended 20XX)

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

Table 1. (Amended 1997 and 20XX)

2012 SWMA Annual Meeting: Mr. Bill Studzinski (General Motors), Chair of a FALS Task Group and ASTM provided a presentation supporting this item. The SWMA Committee acknowledged strong support from their Association, and forwarded the item to NCWM recommending it as a Voting Item.

2012 NEWMA Interim Meeting: Mr. Studzinski provided a presentation and summarized the position of the other regions. NEWMA forwarded the item to NCWM recommending it as a Voting Item.

2013 NEWMA's Annual Meeting: It was recommended the item remain Informational until FALS makes a recommendation to the Committee.

2013 NCWM Interim Meeting: FALS could not reach agreement on this item during their Sunday work session. The Committee received and reviewed several letters in support of this proposal. During open hearings Mr. Studzinski provided a presentation. The Committee also received comments in opposition to the proposal citing the lack of consumer complaints with sub-octane, and it was requested that the Committee wait until the CRC study

provides data that can be used by ASTM and NCWM to determine whether or not a change is necessary. The Committee recommends this to be an Informational Item.

2013 NCWM Annual Meeting: Mr. Ron Hayes, FALS Chair, provided a presentation and stated that the CCR study has been expanded and finalized data is expected by year end. It was also noted the ASTM ballot failed. The Committee concurs to await a recommendation from FALS once they have considered all the data.

Refer to Appendix E in this report (*Report of the 98th National Conference on Weights and Measures [2013]*) for additional letters, presentations, and data that were part of the Committee's consideration.

237-3 I Section 2.1.4. Minimum Motor Octane Number

(This item was withdrawn.)

Source:

BP Global Fuels Technology – West Coast (2011)

Purpose:

Remove obsolete language from the regulation.

Item Under Consideration:

Amend the NIST Handbook 130, Engine Fuels and Automotive Lubricants Regulation, Section 2.1.4. Minimum Motor Octane Number as follows:

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

Background/Discussion:

In the early 1990s, the Table titled “Automotive Spark-Ignition Engine Fuel Antiknock Indexes in Current Practice” was removed from the body of ASTM D4814 and placed into an appendix in ASTM D4814. This appendix is non-mandatory information and is not part of the specification. It is inappropriate for NIST Handbook 130 to continue with the 82 motor octane number minimum for the following reasons: 1) 82 motor octane number minimum is not an ASTM D4814 specification; 2) FTC regulates octane posting and has no motor octane number minimum; 3) neither the Kinder Morgan Pipeline nor the Olympic Pipeline requires a minimum motor octane number specification; and 4) the Colonial Pipeline has no motor octane number minimum for either Reformulated Blendstock for Oxygenate Blending or Conventional Blendstock for Oxygenate Blending.

Recent data shows a low motor octane number is actually preferable for the current fleet of vehicles. Motor and Research octane numbers are equally important to the performance of the motor vehicle engine. A minimum motor octane number requirement offers no more protection to the consumer than the road octane number that is the average of the Motor and Research octane numbers.

2010 SWMA and WWMA Annual Meetings and the 2010 CWMA and NEWMA Interim Meetings: All four associations forwarded the item to NCWM, recommending it as an Informational Item. The SWMA, CWMA, and NEWMA recommended that the item to be developed by FALS.

2011 NCWM Interim Meeting: Mr. Ron Hayes, FALS Chair, reported that the Subcommittee recommended this item be Informational to allow more time for data to be reviewed. Historical data exists and a Coordinating Research Council (CRC) study is being done that will clarify issues and provide data that will assist with making a decision. There were no comments heard from the floor during Open Hearings. The 2011 L&R Committee designated this item as an Informational Item.

2011 NEWMA Annual Meeting: There were no comments heard on this item. The NEWMA L&R Committee recommended that this item move forward as an Informational Item.

2011 CWMA Annual Meeting: The FALS Chair indicated that they are waiting for results from the CRC study and recommends this remain Informational because it is not fully developed. The CWMA L&R Committee recommends that this item move forward as an Informational Item.

2011 NCWM Annual Meeting: It was noted that FALS was continuing to monitor and develop this item and the CRC was reviewing and analyzing the data from the CRC 660 study and additional industry data.

2011 CWMA Interim Meeting: Mr. Hayes said most new cars respond better to the research octane number rather than to the anti-knock index; however, this was still being studied by the CRC and research was ongoing. CWMA recommended that the item remain as an Informational Item.

2011 WWMA and SWMA Annual Meetings and the NEWMA Interim Meeting: All three associations recommended that the item remain as an Informational Item.

2012 NCWM Interim Meeting: FALS held a work session and heard no objections to recommending this item as Informational. Mr. Hayes reported to the Committee that a Task Group under FALS continues to work on this item. Mr. Albuquerque (Colorado), Task Group Chair, reported that information is still being gathered and recommended that it be an Informational Item. The 2012 L&R Committee designated this item as an Informational Item.

2012 NEWMA Annual Meeting: One person remarked that this is a non-issue. NEWMA recommended that the item remain as an Informational Item.

2012 CWMA Annual Meeting: No comments were received. CWMA recommended that the item remain an Informational Item.

2012 NCWM Annual Meeting: Two industry representatives supported further development of this item by the Task Group. Mr. Bill Studzinski (General Motors) will be leading the discussion on this item for the FALS. A stakeholder remarked that we do not need a task group for this item, and we should refer to ASTM.

2012 CWMA Interim Meeting: An oil company representative commented that ASTM does not have a minimum MON (Motor Octane Number) but recommends waiting for data from CRC. He recommended that the item remain Informational until the CRC data is available. General Motors commented that the available CRC data is still important. That data says that MON is still important. CWMA was neutral on the item and recommended that the item remain Informational until CRC octane data is available and reviewed by FALS.

2012 WWMA Annual Meeting: There were no comments. The Committee recommended that ASTM and FALS work in tandem to develop a proposal that provides a phase-out period. WWMA recommended that the item be an Informational.

2012 SWMA Annual Meeting: An industry member commented that this item, which was submitted several years ago, would be in conflict with the new item received this year; so if the new item goes forward, this item would be Withdrawn. SWMA supports this new item. SWMA recommended that the item be Withdrawn.

2012 NEWMA Interim Meeting: General Motors commented that CRC is working to produce data on this topic. Discussions indicated that this is contradictory to previous agenda item and should be Withdrawn. The Committee recommended if this item goes forward to NCWM, it should be assigned to the Fuels and Lubricants Subcommittee. NEWMA recommended that the item be Withdrawn.

2013 NCWM Interim Meeting: A stakeholder recommended that this item be Informational until it is further developed by ASTM. Mr. Hayes remarked that the FALS is also recommending this to be Informational. The Committee agrees and made this an Informational Item.

2013 NEWMA Annual Meeting: The Committee recommends that this item be Informational.

2013 CWMA Annual Meeting: The submitter requested this item be withdrawn. The Committee was informed that data now supports a minimum 82 octane number and this will be placed into the language for ASTM D 4814. The Committee concurs with the submitter and recommended this item be Withdrawn.

2013 NCWM Annual Meeting: The submitter of this proposal and the FALS agreed to Withdraw this item.

Additional letters, presentations and data may have been part of the Committee's consideration. Please refer to Appendix E in the *Report of the 97th National Conference on Weights and Measures* (SP 1160, 2012) to review these documents.

237-4 I Section 3.13 Oil, 3.13.1.4. Engine Service Category, 3.33.1.4.1. Vehicle or Engine Manufacturer Standard, and 3.13.1.4.12. Inactive or Obsolete Service Categories

Source:

Automotive Oil Change Association (2013)

Purpose:

Prevent consumer confusion and government-sponsored product bias regarding legitimate, manufacturer-recommended products, and to prevent installers and retailers from being held responsible for labeling requirements with respect to packaged goods.

Item Under Consideration:

Amend NIST Handbook 130, Engine Fuels and Automotive Lubricants Regulation as follows:

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 vehicle 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)

3.13.1.2. Intended Use. – The label on any vehicle engine (motor) oil container shall contain a statement of its intended use in accordance with the latest version of SAE J183, “Engine Oil Performance and Engine Service Classification (Other than “Energy Conserving”).”

(Amended 2012)

3.13.1.3. 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 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)

3.13.1.4. 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 vehicle engine (motor) oil dispensed from a receptacle, dispenser, or storage tank shall contain the engine service category, or categories, met in letters not less than 3.18 mm ($\frac{1}{8}$ in) in height, as defined by the latest version of SAE J183, “Engine Oil Performance and Engine Service Classification (Other than “Energy Conserving”)” ~~or~~ API Publication 1509, “Engine Oil Licensing and

Certification System,” European Automobile Manufacturers Association (ACEA) European Oil Sequences.

(Amended 2012 and 20XX)

3.33.1.4.1. 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 20XX)

3.13.1.4.2. 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) engine oil dispensed from a receptacle, dispenser, or storage tank shall bear a plainly visible cautionary statement in compliance with the latest version of SAE J183, Engine Oil Performance and Engine Service Classification (Other than “Energy Conserving”)” Appendix A, whenever the vehicle engine (motor) oil in the container or in bulk does not meet an active API service category as defined by the latest version of SAE J183, “Engine Oil Performance and Engine Service Classification (Other than “Energy Conserving”).” **If a vehicle engine (motor) oil is identified as only meeting a vehicle or engine manufacturer standard, the labeling requirements in Section 3.13.1.4.1. Vehicle or Engine Manufacturer Standard apply.**

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

3.13.1.5. Tank Trucks or Rail Cars. – Tank trucks, rail cars, and types of delivery trucks that are used to deliver vehicle engine (motor) oil are not required to display the SAE viscosity grade and service category or categories as long as the bill of lading other documentation provides that information.

(Added 2012)

~~All references to invoice or receipt will be enforceable effective on July 1, 2013.~~

(Amended 2012 and 20XX)

Background/Discussion:

The vast majority of engine oil used at professional fast lube facilities is the most current category of American Petroleum Institute (API) licensed oil. However, older, specialty, and some non-American vehicles take engine oil not listed as active under API’s private regulatory scheme; some are former API licensed oils now considered “obsolete” or “inactive” and some are simply licensed by another organization like ACEA. However, if the original equipment manufacturers (OEM) recommend those engine oils for their vehicles, consumers have a right to use them regardless of API’s blessing, and installers and retailers should be able to sell them without obstruction.

The Automotive Oil Change Association (AOCA) amendment is necessary because a cautionary statement appearing on service receipts without explanation will inappropriately mislead consumers with older and uncommon model vehicles into believing they should not use OEM-recommended engine oil. The average fast lube customer does not recognize API or SAE (Society of Automotive Engineers) to mean anything in particular but “CAUTION” and “OBSOLETE” in big capital letters could only be understood as negative. Scaring consumers in this way will not only push them to buy more expensive engine oil they don’t need, but also engender distrust in their installer service providers for recommending and/or using OEM-recommended engine oil.

The average age of cars in the current fleet is nearly 11-years old, and it is not unusual for fast lubes to have customers with vehicles twice that age; for example, there are millions of opportunities for consumers to be misled into rejecting proper engine oil. The fact is American consumers are hanging onto their vehicles longer than API is

hanging onto its service categories. When API designates a motor oil category as inactive, this does not mean consumers with vehicles designed to use that category turn in their cars or otherwise want to buy a more expensive grade of motor oil going forward. Therefore, a category of motor oil designed to work for particular makes and models of vehicles should not be burdened with the chilling effect of a cautionary statement absent a specific clarification acknowledging the preeminence of the OEM's recommendations.

The new standard phase-in factor must be considered as well. When API publishes a new edition of 1509, *Engine Oil Licensing and Certification System*, and/or creates a new service category, a reasonable phase-in period for bulk oil stock is necessary to accommodate older vehicle owners' needs; for example, it may be in those customers' best interests—both functionally and economically—to use motor oil developed in accordance with an earlier edition or service category so long as the automobile manufacturer originally recommended it and its continued use has no impact on any remaining warranty coverage. Although it is common for API to retain a couple of the most recent service categories as “active,” API could choose to make all but the most recent service category “obsolete.” For fast lube operators to automatically upgrade bulk oil stock at API-determined intervals would be tantamount to giving API control over the price of oil change services regardless of what the market can bear. And, what about packaged engine oil products already on the shelf or in the distribution chain when API makes a unilateral decision to deactivate an engine oil category? As a practical matter, tens of thousands of retailers and installers cannot remark millions of packages to coincide with API's timing or take the financial hit for sending it all back in violation of purchase agreements. Attempting to enforce the labeling requirement at this level would be a nightmare for everyone involved. The way to avoid this problem is to adopt AOCA's amendment so that the requirement for proper labeling of packaged containers of engine oil rest with the party in control of the packaging – the manufacturers.

Without the amendment, the labeling requirement will be very difficult to enforce given the inventory of packaged goods remaining after an active engine oil category has been declared inactive or obsolete. Fast lubes would experience catastrophic business loss if customers with older and uncommon model vehicles were alienated. Maintenance costs for consumers with older model cars could easily double if they are confused into believing they need the latest category of engine oil.

AOCA contends that the proposed amendment will accomplish three important goals: 1) prevent unintended consumer confusion and product stigma from using a cautionary statement by reestablishing the connection to OEM recommendations; and 2) provide the necessary exemption to protect retailers and installers for selling unlawful packaged inventory; which leads to 3) an increase in practical enforcement prospects.

The most analogous regulatory situation to the one at issue in AOCA's proposed amendment is found in the Federal Trade Commission's (FTC) Test Procedures and Labeling Standards for Recycled Oil (16 CFR 31, www.gpo.gov/fdsys/pkg/CFR-2011-title16-vol1/pdf/CFR-2011-title16-vol1-part312.pdf). In the rulemaking process, FTC specifically rejected requiring recycled engine oil to be labeled “recycled” because of the stigma associated with the term at that time (see 72 FR 14410 – 14413 & FN11, 1 H.R. Rep. No. 96–1415, 96th Cong. 2d Sess. 6 (1980), reproduced at 1980 U.S. Code Cong. & Ad. News 4354, 4356. “Oil should be labeled on the basis of performance characteristics and fitness for its intended use, and not on the basis of the origin of the oil.”). The National Automobile Dealers Association also commented in favor of this approach: “NADA further stated that by not requiring that “substantially equivalent” recycled oils be labeled “recycled” or “re-refined,” used oil processors are able to market their products effectively.” (72 FR at 14411) No “recycled” or other potentially derogatory designation is required so long as the finished product meets the appropriate API standard.

2012 CWMA Interim Meeting: AOCA stated that oil change businesses are small businesses without legal staff and they need clear guidance. These businesses follow the OEM recommendations, which recommend oils that do not follow API or SAE standards. The language should acknowledge that some manufacturers approve and recommend their own oil (i.e., General Motors (GM) and Audi-Volkswagen.) AOCA thought the current language required all OEM oils that did not meet a specific API performance standard to be labeled as obsolete. A GM representative confirmed that GM produces their own oil, Dexos (the best oil for any car), which does not have an API certification. A FALS member shared the API motor oil guide, (refer to Appendix C in this report, *Report of the 98th National Conference on Weights and Measures [2013]*) which labels specific categories of oil as obsolete. If a manufacturer does not label the oil with an API obsolete category, the product is not considered to be obsolete. OEM manufacturers that were named do not label their oil with an obsolete category, and so oil changers do not

need to worry about the obsolete label being used on OEM motor oils. AOCA also asked if there would be a grace period to sell product purchased prior to January 2013. States regulators clarified that nothing is written in the regulation, and grace periods would be determined on a state by state basis. AOCA reiterated that the language should clearly state that OEM oils that do not have API certification are not obsolete. AOCA also stated that installers should not be responsible for labeling on packaged products received. A regulatory official stated retailers in other industries are responsible for labeling on packages received, and it would be an unfair market advantage to allow some retailers to use products that were illegally labeled. Since the current language is not clear about exactly what oils are obsolete, the Committee recommended that FALS produce language for the NCWM Interim Meeting clearly stating that OEM recommended oils that are not API certified are not obsolete. CWMA forwarded the item to NCWM, recommending it as a Voting Item with the stipulation that FALS develop the clarifying language.

2012 WWMA Annual Meeting: Ms. Kristin Macey (California) opposed this item because it removes the retailer's accountability. Mr. Kevin Ferrick (API) opposed the additional language. Mr. Ferrick also provided a presentation to the WWMA and written comments to the Committee. Mr. Kurt Floren (Los Angeles County, California) opposed the language for similar reasons as stated by Ms. Macey. WWMA did not forward the item to NCWM.

2012 SWMA Annual Meeting: An API representative voiced API's opposition to the item and provided the written testimony in dispute of the comments and claims made by the submitter. The SWMA Committee believed there was lack of support for the item and that the oil change industry has a poor understanding of the API standards. SWMA did not forward the item to NCWM.

2012 NEWMA Interim Meeting: API stated that it opposes the item and that specifics have been submitted in writing. API suggested this proposal and Item 237-4 be Withdrawn. General Motors indicated the proposal appears to allow older formulations of engine oil, but newer formulations give better performance, even in older vehicles. GM prefers current formulation of engine oil. NEWMA did not forward the item to NCWM.

2013 NCWM Interim Meeting: A state opposed this item and would like to see it Withdrawn. The FALS Chairman remarked that there are several engine oils designed for specific model vehicles and FALS is working to resolve this issue. A Committee member remarked that a statement of accountability should be within the language. The Committee would like to see additional language developed by FALS and made this an Informational Item.

2013 NCWM Annual Meeting: FALS submitted modified language for Sections 3.33.1.4. Engine Service Category, 3.33.1.4.1. Vehicle or Engine Manufacturer Standard, and 3.33.1.4.1.2. Inactive or Obsolete Service Categories. The Committee would like to have regional input on this modified language to review at the 2014 NCWM Interim Meeting. The Item Under Consideration contains this modified language.

Additional letters, presentations, and data may have been part of the Committee's consideration. Please refer to Appendix B in the *Report of the 97th National Conference on Weights and Measures* (SP 1160, 2012), and Appendix C in this report (*Report of the 98th National Conference on Weights and Measures* [2013]) to review these documents.

237-5 V Section 3.13.1.4.5. Tank Trucks or Rail Cars and 3.13.1.6. Documentation

(This item was adopted.)

Source:

Automotive Oil Change Association (2013)

Purpose:

Make compliance and enforcement practical, efficient, and fair.

Item Under Consideration:

Amend NIST Handbook 130, Engine Fuels and Automotive Lubricants Regulation as follows:

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 vehicle 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)

3.13.1.2. Intended Use. – The label on any vehicle engine (motor) oil container shall contain a statement of its intended use in accordance with the latest version of SAE J183, “Engine Oil Performance and Engine Service Classification (Other than “Energy Conserving”).”

(Amended 2012)

3.13.1.3. 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 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)

3.13.1.4. 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 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 ($\frac{1}{8}$ in) in height, as defined by the latest version of SAE J183, Engine Oil Performance and Engine Service Classification (Other than “Energy Conserving”) or API Publication 1509, “Engine Oil Licensing and Certification System.”

(Added 2012)

3.13.1.4.1. 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) engine oil dispensed from a receptacle, dispenser, or storage tank shall bear a plainly visible cautionary statement in compliance with the latest version of SAE J183, “Engine Oil Performance and Engine Service Classification (Other than “Energy Conserving”)” Appendix A, whenever the vehicle engine (motor) oil in the container or in bulk does not meet an active API service category as defined by the latest version of SAE J183, “Engine Oil Performance and Engine Service Classification (Other than “Energy Conserving”).”

(Added 2012)

3.13.1.4.5. Tank Trucks or Rail Cars. – Tank trucks, rail cars, ~~or~~ and types of delivery trucks that are used to deliver 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 as long as the bill of lading or other documentation provides that information.**

(Added 2012) **(Amended 2013)**

3.13.1.6. 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 engine (motor) oil delivered as defined in Section 3.13.1.1. Viscosity; Section 3.13.1.2. Intended Use; Section 3.13.1.3. Brand; Section 3.13.1.4. 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 3.13.1.4.1. Inactive or Obsolete Service Categories, documentation must be retained at the retail establishment for a period of not less than one year.
(Added 2013)

~~All references to invoice or receipt will be enforceable effective on July 1, 2013.~~
(Amended 2012 **and 2013**)

Background/Discussion:

There is a chain of engine oil purchasers involved in the sale of bulk engine oil, all of whom need accurate and adequate information about the commodity so that they can make price and quantity comparisons. The engine oil distributor is a purchaser with respect to engine oil manufacturers, the installer is a purchaser with respect to engine oil distributors, and the consumer is a purchaser with respect to installers. Installers like fast lube operators can only provide accurate and adequate information about bulk engine oil to consumers if their distributors provide it at the point of delivery. It would be manifestly unfair to expect installers to legally vouch in writing for the quality of distributors' engine oil products absent a corresponding written verification requirement.

The original language for consideration (refer to the *Report of the 97th National Conference on Weights and Measures* [SP 1160, 2012], L&R Committee Report) creating a Method of Sale for Section 2.33.1.4.2. Tank Trucks and Rail Cars and an Engine Fuels and Automotive Lubricants Regulation for Section 3.13.1.4.2. Tank Trucks or Rail Cars inadvertently created a loophole for distributors to avoid providing necessary product documentation at the time of delivery.

Whether or not NCWM waives tank truck labeling is not the issue. The problem lies in the converse this provision allows: if a distributor displays the SAE viscosity grade and service category on a tank truck, then they do not have to provide a bill of lading. This poses a serious risk to installers like fast lubes because the regulation requires them to vouch for viscosity grade, service category, and brand on customer receipts but does not guarantee that they will receive that same information in writing from their distributors—the parties with actual control over product quality/identity.

There is also no practical way for fast lubes or NCWM to enforce this “either/or” regulatory scenario. If a distributor arrives at an installer’s facility without documentation, how can the installer hold the distributor to it under NIST Handbook 130? The distributor can simply claim their truck is adequately marked. Installers are not professional truck inspectors; they cannot be expected to act as enforcement agents in this scenario. Meanwhile, in order for local weights and measures officials to hold a distributor accountable, the official would have to arrive on the scene at the time of delivery, which is unlikely at best. Any subsequent official inquiry would take place after the distributor has had the opportunity to subsequently mark any unmarked truck at issue. Moreover, risk of distributor failure in providing necessary documentation is high because most do not and never have been willing to provide bills of lading or other documentation to fast lubes at the time of delivery.

Additionally, the imperative for any installer labeling and/or receipt information requirements to be matched by corresponding requirements for engine oil distributors includes “brand.” Installers cannot purport to verify via any form of documentation information that distributors have not documented at delivery. Method of Sale, Section 2.33. Oil and Engine Fuels and Automotive Lubricants Regulation, Section 3.13. Oil requires installers to verify brand in writing and, therefore, distributors should be required to verify it, too. For NCWM to require otherwise would be manifestly unfair to installers by subjecting them to liability for the bad acts of distributors without any paperwork trail to rely upon in their own defense.

No one has more at stake than installers. Should a product quality problem occur with packaged goods, it’s relatively easy to trace the goods back to the manufacturer. However, this is not the case with motor oil transported in bulk; it all looks alike, it may have “changed hands” numerous times before reaching the fast lube facility, and even with testing can be impossible for a fast lube to verify because oil companies use chemical markers that only they can identify. Since motor oil specifications have become so precise and so expensive—fast lube operators stand to lose thousands of dollars every time a distributor delivers a lesser product. Moreover, when a distributor delivers the wrong product, it’s the fast lube operator who gets stuck holding the bag for consumer claims, which can be excessive if the “wrong” product did or could cause engine damage. It takes weeks before a bad load of motor oil is

detected and by then anywhere from 500 to 700 customers has been serviced. The remedy? All of the customers must be called back and re-serviced for free before any damage has the opportunity to occur. Requiring distributors to provide the same documentation required of installers represents the minimum necessary step to at least protect installers from misrepresentation claims when a distributor “mis-delivers” bulk oil.

API and ILMA have been publicly quoted as supporting the requirement that distributors provide documentation at delivery as the new paragraphs at issue already mandate it under all circumstances. See Lube Report (August 1, 2012) www.imakenews.com/lng/e_article002489327.cfm?x=b11,0,w

EPA’s Federal Used Oil Management Standards require detailed transporter chain of custody documentation (40 CFR Part 279). See also EPA’s *Chain-of-Custody Procedures for Samples and Data* (www.epa.gov/apti/coc/), which makes clear that failure to maintain a proper chain of custody regarding samples and/or data will destroy any ability to defend oneself if challenged.

According to the U.S. Department of Agriculture (USDA), segregation and documentation for specialty (bulk) crops continue from the elevator to the final producer or consumer. [*Traceability in the U.S. Food Supply: Economic Theory and Industry Studies* (USDA Economic Research Service 2004)].

Under the FDA Food Modernization Act (Public Law 111-353), documenting the production and distribution chain of food products is required so that “in case of a problem, a product can be traced back to the source.”

DOT overlaps with EPA regarding the Federal Hazardous Waste Manifest System (40 CFR Part 262), which mandates detailed documentation of hazardous waste from cradle to grave; for example, from generator to transporter to end user/disposal.

The submitter provided the following websites as evidence that “Mis-delivery of liquid products must happen with some recognized frequency because the subject is big business for the insurance industry.”

<http://www.johannesagency.com/petroleum>

- <http://www.canalinsurance.com/coverage/truckers-general-liability>
- <http://www.marianoagency.com/programs/transportation>
- <http://falcigno.com/products-a-services/environmentalchemical>
- <http://www.iaaofillinois.org/convention2011/documents/SpeakerOutlines/CGL%20and%20Auto%20Endorsements.pdf>
- <http://www.safapeoria.com/data/uploadDirectory/applications/commercialauto/EMPIRE%20FIRE%20AND%20MARINE/Motor%20Carrier/motor%20carrier.pdf>
- <http://www.big-ins.com/generalapps/SuplAppFuelMkrs2003.pdf/>
- <http://www.insurancecommunityuniversity.com/UniversityResources/InsuranceGlossaryFREE/InsuranceGlossaryM/MisdeliveryofLiquidProductsCoverageCommercial.aspx>

2012 CWMA Interim Meeting: AOCA stated that the current language would allow the distributor to either label the truck or tank car or the bill of lading. The language should clearly state that distributor needs to provide the retailer with a bill of lading or other documentation that includes product identity information. A FALS member acknowledged that the current language could be construed to say that the distributor does not need to provide this documentation, and this was not the intent. The Committee recommends that FALS provide concise language that states that a bill of lading or other documentation with appropriate product information must be provided to the retailer. FALS should submit proposed language to the NCWM L&R Committee for the Interim meeting. CWMA

forwarded the item to NCWM, recommending it as a Voting Item with the stipulation that FALS develop language. In 2013 at the CWMA Annual meeting there was continued support for this to be a Voting Item.

Mr. Ferrick provided a presentation at the 2012 WWMA Annual Meeting. Mr. Ferrick remarked that the submitted proposal was rather wordy; however; he does not disagree with the language. Ms. Kristin Macey (California) supported the submitted proposal. The Committee agreed that the submitted proposal is too lengthy and presented alternative language for consideration. The Committee regretted that the submitter was not present to answer questions. WWMA forwarded the item to NCWM, recommending it as an Informational Item as modified:

3.13.1.4.5. Tank Trucks or Rail Cars. – Tank trucks, rail cars, and other types of delivery trucks that are used to deliver vehicle engine (motor) oil are not required to display the SAE viscosity grade and service category or categories, however as long as the bill of lading or other documentation shall provides that information.

2012 SWMA Annual Meeting: The committee agreed that adequate documentation should be provided. SWMA recommends this as a Voting Item.

2013 NEWMA Annual Meeting: The NEWMA L&R Committee believes this item is fully developed and recommends this to be a Voting Item.

2013 NCWM Interim Meeting: Mr. Hayes remarked that FALS is recommending language changes for this item. FALS developed Section 3.13.1.6. Documentation, which resolves the issues brought before the Subcommittee. FALS recommended to the Committee that the revised language move forward as a Voting Item. The Committee concurs with the language revisions and proposed this item be a Voting Item. At the 2013 NCWM Annual Meeting FALS informed the Committee that this item is fully developed. The Committee recommended the item be presented for a Vote.

237-6 W Section 3.15. Biodiesel and Biodiesel Blends

(This item was withdrawn.)

Source:

Southern Weights and Measures Association (2010)

Purpose:

Remove the exemption for declaration of biodiesel content on product transfer documents for biodiesel blends up to 5 %.

Item Under Consideration:

Amend the NIST Handbook 130, Engine Fuels and Automotive Lubricants Regulation as follows:

3.15. Biodiesel and Biodiesel Blends.

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

3.15.2. Labeling of Retail Dispensers.

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

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

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

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

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

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

(Amended 20XX)

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

- (a) Biodiesel blends that contain less than or equal to 5 % biodiesel by volume are exempted from the requirements of Sections 3.15.1. Identification of Product, and 3.15.2. Labeling of Retail Dispensers when it is sold as “diesel fuel” as required in Section 3.3. Diesel Fuel.
- (b) Diesel fuel containing less than 1 % by volume biodiesel is exempted from the requirement of Section 3.15.3. Documentation for Dispenser Labeling Purposes Required on Transfer Documents.
- (c) Diesel fuel containing 1 % and not more than 5 % by volume biodiesel fuel is exempt from disclosing the actual percent by volume of biodiesel as required in Section 3.15.3. Documentation for Dispenser Labeling Purposes. However, the term “Contains Biodiesel” or other similar terms shall be used.

(Added 2005) (Amended 2008 and 20XX)

Background/Discussion:

2009 SWMA Annual Meeting: A discussion over blending was presented by a FALS member. Biodiesel is being blended at many terminals across the country in concentrations up to 5 %. Marketers downstream of the terminal are then attempting to blend additional biodiesel to target levels, and finding that their product is being over-blended because they were not aware that the fuel contained any biodiesel. According to Mr. Jennings (Tennessee Department of Agriculture) at least one major truck stop operator has already voiced concerns to the FALS Chair. This amended proposal will remove the exemption declaration of biodiesel content on product transfer documents for biodiesel blends up to 5 %. Biodiesel is blended at terminals in concentrations up to 5 %. Mr. Jennings believed it was important to start this recommendation and have the FALS Chair get the proposal out to all members of the FALS for their comments before NCWM Interim meeting in January 2010. SWMA forwarded the item to NCWM, recommending it as a Voting Item.

3.15. Biodiesel and Biodiesel Blends

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

3.15.2. Labeling of Retail Dispensers.

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

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

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

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

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

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

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

(Added 2005) (Amended 2008 **and 20XX**)

2010 NCWM Interim Meeting: Mr. Hayes, FALS Chair, gave an update on the Subcommittee’s work to remove the current exemption for biodiesel disclosure in diesel fuel at 5 % and below on product transfer documents.

A draft of substitute language was circulated among FALS members prior to the Interim Meeting. This substitute language expanded the disclosure of biodiesel content on all transfer documents (not limited to ones to the retailer) and for levels greater than 1 % biodiesel. The substitute was an attempt to find middle ground. FALS members were more agreeable to this substitute, but many still thought more work was needed.

The L&R and FALS received seven letters (refer to L&R Appendix E within the *Report of the 95th National Conference on Weights and Measures* [SP 1115, 2010]) that do not support this proposal as stated. The Committee does support working on this issue and receiving feedback from industry. There is concern with the documentation and comingling of fuels. If fuel is comingled, it would need to be sampled every time, which could be quite costly.

An official requested that this item move forward as a Voting Item and meanwhile NEWMA and CWMA could review and further develop the language at their spring 2010 meetings. API stated there are many things to consider, such as preemption language, cost implications, commercial issue of declaring with each transaction. API has worked with marketers, but there continues to be a difference of opinion and no consensus. It was voiced by industry that all biodiesel needs to be documented on the paperwork. If not, it puts the wholesaler, retailer, and consumer at risk. There was a comment from a stakeholder that they do not agree with API’s comment and that this has been a two-year battle on who gets to do the blending. Blenders are over-blending because they are not aware of what the current blend is. To prevent this situation, it would require disclosure on the transfer document. The 2010 L&R Committee designated this item as an Informational Item.

2010 NEWMA Annual Meeting: A stakeholder reported that FTC has not changed the existing posting rule. NEWMA recommended that the item remain as an Informational Item.

2010 CWMA Annual Meeting: Several commented that the exact percentage of an alternative fuel needs to be known. Without the percentage being known, mislabeling can occur, which is not good for consumers, marketers, and the environment and renewable fuels. What is the downside of providing this information? A representative of the National Biodiesel Board (NBB) does not support this proposal and would like to have further discussions to seek what is best for the entire industry. They also commented that FTC declined to modify requirements for disclosure on product transfer documents for fuels containing 5 % or less biodiesel. An official disagreed that the exact percentage is necessary since it is the blender's responsibility to test the product prior to blending. A representative of the Renewable Fuels Association would like to see the proposal expanded to include all additives and stated that the focus needs to be in broader terms instead of renewable fuels and recommended that the scope include all blending components. CWMA recommended that the item remain as an Informational Item and that FALS form a task group under their guidance to develop this proposal.

2010 NCWM Annual Meeting: The Committee received numerous letters (refer to Appendix E within the *Report of the 95th National Conference on Weights and Measures* [SP 1115, 2010]) and heard from fifteen stakeholders and industry representatives, supporting Section 3.15.3. Documentation for Dispenser Labeling Purposes that requires disclosure. Several participants expressed concerns with sections of the proposal. FTC has the authority to protect consumers, and they are considering requirements for product transfer documents. Several stakeholders indicated that they expect FTC to issue a proposed rule on biodiesel. The sections that are of concern to stakeholders are Section 3.15.4. Exemption (b) and (c), since they conflict with reporting of tax collections on biodiesel. The exact amount of the blend needs to be documented on the transfer document. The concern is when fuel is picked up from various locations and delivered; the actual amount of biodiesel is not documented. Currently blending at the terminal is not an issue. The L&R Committee agreed to allow time for the FALS to receive additional information and further discuss this item.

2010 CWMA Interim Meeting: A representative from a Petroleum Marketers Association commented that disclosure sets the tone for a chain of events for biodiesel. It was important for disclosure to be provided all the way through the distribution process because of the potential for over-blending. He believes that it is not realistic for wholesale distributors to test for biodiesel due to the cost. He supports the proposal with exception of the exemptions provided in Section 3.15.4. Exemption (b) and (c). An official agreed with this testimony. Another official commented that the current proposal follows the same format as the ethanol regulation. A petroleum dealer mentioned that, due to the expanded Renewal Fuels Standard (RFS), disclosure is needed in order to meet the mandates for blending.

A representative with the NBB commented that this proposal needs further development by FALS. She believes that we have not heard from all segments of the industry regarding this proposal. She also expressed concern that there will be no benefit to consumers if the cost of the extra testing of fuel is being passed on to consumers. It was mentioned that there are quick testing methods available for determining biodiesel content in the field; although, some are more accurate than others. The NBB representative also stated that the FTC believes it is the responsibility of the blender to determine biodiesel content prior to blending.

A producer mentioned that the disclosure proposal would require terminals to purchase equipment and to do additional testing. The producer is concerned about tank stratification and the need to change bills of lading as the content varies. Cost and manpower are major concerns for producers. A marketer provided testimony that it is more efficient for terminals to purchase testing equipment as opposed to requiring all downstream blenders to purchase testing equipment. He stated that changing bills of lading is only a software change. He believes that it is the blenders' obligation to meet the law for labeling, and it is difficult if the biodiesel content is not disclosed. The NBB representative questioned how often marketers test. A marketer responded that they do not routinely test; since they rely on transfer documents to accurately disclose biodiesel content. Another marketer stated that producers can control what goes into their tanks and questioned if producers know how much biodiesel is in each batch. A producer responded that for barrels received by water in Savannah, Georgia, the biodiesel content is only disclosed on Plantation pipeline shipments if it is more than 5 %. The CWMA recommended that the item remain as an Informational Item to be further developed by FALS.

2010 WWMA and SWMA Annual Meetings: An industry representative spoke in support of keeping this item Informational and allowing FALS to further develop the requirements in light of the comments received. An

industry representative stated that all shipping documents should show the exact blend of biodiesel. Both Associations recommended that the item remain as an Informational Item.

2010 NEWMA Interim Meeting: The Committee received written comments from API. NEWMA recommended that the item remain as an Informational Item.

2011 NCWM Interim Meeting: A member of both the FALS and L&R Committee reported that this item was debated during the FALS work sessions and a consensus could not be reached. It was agreed upon that a Biodiesel Disclosure Task Group be formed to further study this item. Mr. Howell, MARC-IV, and Mr. Bell, Echols Oil Company, Inc. will co-chair this Task Group. The Committee received five letters yet no additional comments were received in Open Hearings. The 2011 L&R Committee designated this item as an Informational Item.

FALS reported that a smaller work group of its members plan to complete a report containing possible solutions and present it to FALS at the 2012 NCWM Interim Meeting in January.

2011 NEWMA Annual Meeting: A consultant with the National Biodiesel Board (NBB) stated that a report is being prepared and will be ready for the 2011 Annual NCWM meeting. NEWMA recommended that the item remain as a Developing item.

2011 CWMA Annual Meeting: Mr. Ron Hayes, FALS Chairman and representative of Missouri, remarked that a WG was formed under FALS to develop new language. A petroleum representative opposed the item as written as it does not allow the blender to disclose what level blending has occurred. Another petroleum representative remarked that there are other implications beyond small percentages of biodiesel with other additives. It was agreed that as blender you should know exactly what you are getting, but it needs to be tested. The question is who is the responsible party for providing the test? The CWMA recommended that the item remain as a Developing item.

2011 NCWM National Meeting: Mr. Hayes reported that a Subcommittee under FALS has been formed to work out a compromise on the requirements and a report with solutions should be prepared for FALS at the 2012 NCWM Interim Meeting.

2011 CWMA Interim Meeting: The NBB representative stated a task group was formed under the guidance of FALS to develop language. The Petroleum Marketers and Convenience Store of Iowa (PMCI) representative stated there were 137 biodiesel blenders in Iowa and the current proposed language is a real concern to blenders, especially the 5 % blenders. The marketers do not support an exemption for blends of 5 % or less on the product transfer documents. One official agreed and suggested removing the exemption for 5 % blends stating that if percentage is known it reduces the need for downstream testing. The NBB representative countered that testing adds a lot of cost before the product reaches the consumer and that 5 % biodiesel or less meets the ASTM D975 diesel fuel specification and there is no performance difference. She also stated the current proposed language may be the best compromise that can be achieved. The official reported that terminals in her state already certify how much biodiesel leaves the terminal. The NBB representative countered that biodiesel was developed as a fungible product and is a drop-in fuel. Further, fungibility issues dictate that we not disclose the exact biodiesel content. The PMCI representative stated that gallons of biofuel must be reported, and the language in Item 237-3 (refer to *the Report of the 96th National Conference on Weights and Measures* (SP 1125, 2011) is a compromise because his constituents did not have input into the exemption language. An energy company representative stated that Plantation Pipeline is saying diesel fuel may contain up to 5 % biodiesel. Therefore, batch certification would be required to determine content. Stratification is also a concern because even batch testing may not be indicative of the true content. The PMCI representative stated this issue is really about the Renewable Identification Number (RIN) credit and how they are bought and sold. The NBB representative stated that weights and measures are most concerned with making sure there is equity in the marketplace and that profitability in the marketplace is left up to the market. An official questioned where the burden of analysis lies and if the blender is making a profit then it is reasonable to expect the blender to bear the cost. FALS is currently gathering information on this item. CWMA recommended that the item remain as an Informational Item.

2011 WWMA Annual Meeting: There were no comments heard. The Committee would like to get a recommendation from FALS before taking further action. WWMA recommended that the item remain as an Informational Item.

2011 NEWMA Interim Meeting: It was agreed that any action taken should be consistent with other federal agency labeling. NEWMA recommended that the item remain as an Informational Item.

2011 SWMA Annual Meeting: A representative of the NBB conveyed a message on behalf of the chair of FALS, that it will meet before the NCWM Interim Meeting and provide a report to FALS for the L&R Committee. SWMA recommended that the item remain as an Informational Item.

2012 NCWM Interim Meeting: FALS met and Mr. Bell and Mr. Howell, Task Group Co-Chairs provided a presentation on the updated data and study. They presented a written report to FALS on January 17, 2012. A plan was submitted for the activities of this Task Group for the next eighteen months. FALS recommended that this item remain as an Informational Item. The 2012 L&R Committee designated this item as an Informational Item.

2012 NEWMA Annual Meeting: There were no comments on this item. NEWMA recommended that the item remain as an Informational Item.

2012 CWMA Annual Meeting: Mr. Hayes remarked that Steve Howell and Sam Bell have written a white paper on this item and the paper will be posted on the NCWM website prior to the 2012 NCWM Annual Meeting. CWMA recommended that the item remain as an Informational Item.

2012 NCWM Annual Meeting: Mr. Hayes, FALS Chairperson, reported that Mr. Bell and Mr. Howell gave a presentation to the Subcommittee, however; there was no consensus on how to move forward with this item.

2012 CWMA Interim Meeting: The FALS Chairman reported that the WG did not reach a consensus and recommended withdrawing the item. A regulatory official asked if withdrawing the item would cause harm. Another stated that biodiesel marketers needed to know biodiesel content, and that the item should move forward as a Voting Item. The Iowa Petroleum Marketers representative said this is a state enforcement issue and the item should be withdrawn. He said that 16-CFR 306 does not address diesel. Iowa had already passed regulations for this and the language in this item would not work in Iowa. Another official recommended moving forward as a Voting Item. A National Biodiesel Board representative said while NBB tries to remain neutral, that this language could have unintended consequences for states where biodiesel is not produced or marketed, resulting in unnecessary testing for biodiesel content. A regulatory official stated that biodiesel is present in states that do not produce or market it. She also stated that some consumers don't want biodiesel content. NIST Handbook 130 is currently consistent with FTC regulations, and NBB recommends Withdrawing this item. FTC reviewed this issue and did not support further disclosure of biodiesel content. Many states do not produce biodiesel, and many states that do produce biodiesel already have state regulations in place that would pre-empt NCWM standards. The work group has attempted for several years to reach consensus and was unable to do so. For these reasons, CWMA recommended that the item be Withdrawn.

2012 WWMA Annual Meeting: Ms. Rebecca Richardson (NBB) remarked that she heard Mr. Hayes, FALS Chairperson, inform CWMA this fall that FALS could not be agree on alternate language and recommended this item be Withdrawn. The Committee would like to get an update from FALS at the 2013 NCWM Interim Meeting. WWMA recommended that the item be an Informational Item.

2012 SWMA Annual Meeting: An industry representative from the National Biodiesel Board (NBB) commented that since this item was introduced in 2010, both the NCWM L&R Committee and the Fuels and Lubricants Subcommittee assigned this issue to a smaller work group co-chaired by Mr. Steve Howell and Mr. Sam Bell. There have been several concerns expressed during the vetting of this proposal, and ultimately the industry could not come to a consensus on the proposed language or any alternative. In fact, considering oral testimony and comments from the work group, the proposed language, which was a compromise from the original submission, was less desirable among fuel producers, marketers, and pipeline representatives. Since the proposed language was introduced, technology for the rapid analysis of biodiesel blends has become more sophisticated, and there are more tools to determine accurate biodiesel blends in real time. Anyone who wishes to blend biodiesel has the ability to determine the blend they are starting with before they add more. Since the NBB has concerns about negative, unintended consequences from this proposed new disclosure requirement, and considering the industry could not come to consensus on national model language, NBB's recommendation is that states need to determine individually whether or not local conditions and regulations make it necessary to further disclose biodiesel blends below 5 % within their

own markets. Therefore, the NBB recommends that this proposal be Withdrawn. A letter to FALS on the task group recommendation will be provided before the NCWM Interim Meeting. The letter will include a recommendation that the Task Group be disbanded. A state official recommended the item be either Withdrawn or made a Voting Item, since the item has been on the agenda since 2010. The Committee recommended that the item be retained as Informational until a recommendation is received from FALS. SWMA recommended that the item be an Informational Item.

2012 NEWMA Interim Meeting: The NBB gave an update. There is no consensus on the issue. NBB recommended that item be Withdrawn consistent with FALS position. NEWMA recommended that the item be Withdrawn.

2013 NCWM Interim Meeting: Sam Bell who co-chairs of a task group under stated they could not reach consensus on this item. FALS recommended to the Committee that this item be Withdrawn in its entirety. The Committee concurs with FALS' recommendation to Withdraw this item.

2013 NEWMA and CWMA Annual Meetings: Both associations concur that this item should be Withdrawn.

2013 NCWM Annual Meeting: The Committee accepted the recommendation of the FALS to Withdraw this item.

Additional letters, presentations and data may have been part of the Committee's consideration. Please refer to Appendix G in the *Report of the 97th National Conference on Weights and Measures* [SP 1160, 2012] to review these documents.

237-7 W Sections 3.2. Automotive Gasoline and Automotive Gasoline-Oxygenate Blends, 3.8. E85 Fuel Ethanol, and 3.9. M85 Fuel Methanol

(This item was withdrawn.)

Source:

Missouri Department of Agriculture (2013)

Purpose:

Reduce the potential for misfueling consumer vehicles.

Item Under Consideration:

Amend NIST Handbook 130 Engine Fuels and Automotive Lubricants Regulation as follows (renumbering remaining paragraphs accordingly):

3.2. Automotive Gasoline and Automotive Gasoline-Oxygenate Blends.

3.2.1. Posting of Product Name Required ~~Antiknock Index Required~~ — All automotive gasoline and automotive gasoline-oxygenate blends shall post the antiknock index in accordance with applicable regulations, 16 CFR Part 306 issued pursuant to the Petroleum Marketing Practices Act, as amended. Dispenser nozzle(s) shall conspicuously display the product name

Example: Gasoline or E15 Gasoline

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

3.8. E85 Fuel Ethanol.

3.8.1. Posting of Product Name Required. – Dispenser nozzle(s) shall conspicuously display the product name ~~How to Identify E85 Fuel Ethanol. – Fuel ethanol shall be identified as E85.~~

Example: E85 or Ethanol Flex Fuel

3.8.1.2. How to Identify E85 Fuel Ethanol. – Fuel ethanol shall be identified as E85.

3.8.2.3 Labeling Requirements.

- (a) Fuel ethanol shall be labeled with its automotive fuel rating in accordance with 16 CFR Part 306.
- (b) A label shall be posted which states “For Use in Flexible Fuel Vehicles (FFV) Only.” This information shall be clearly and conspicuously posed on the upper 50 % of the dispenser front panel in a type at least 12.7 mm (½ in) in height, 1.5 mm (1/16 in) stroke (width of type). A label shall be posted which states, “Consult Vehicle Manufacturer Fuel Recommendations,” and shall not be less than 6 mm (¼ in) in height by 0.8 mm (1/32 in) stroke; block style letters and the color shall be in definite contrast to the background color to which it is applied.

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

3.9. M85 Fuel Methanol.

3.9.1. ~~How to Identify M85 Fuel Methanol. – Fuel methanol shall be identified as M85.~~ Posting of Product Name Required – Dispenser nozzle(s) shall conspicuously display the product name.

Example: M85

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

Example: M85

3.9.2.3. Retail Dispenser Labeling.

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

Example: M85 Methanol

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

(Amended 2008 **and 20XX**)

Background/Discussion:

The level of confusion for consumers fueling vehicles continues to grow with the introduction of new fuels in the marketplace. This amendment would ensure proper delivery of the selected product and reduce the potential of mis-fueling vehicles. Missouri and other states have received complaints from consumers who have fueled their vehicles with inappropriate products. At this time, practically all gasoline dispensers nationwide do not comply with NIST Handbook 44, Section UR.3.2. or S.1.6.4.2.(a) as they do not display the product identity (i.e., gasoline).

2012 CWMA Interim Meeting: One official supported the item, but recommended that FALS review the language so that stakeholders on that Subcommittee have an opportunity to review the language. An ethanol industry representative also supported the item, stating that the language should be reviewed by industry stakeholders. CWMA supported the item; recommending FALS review. CWMA forwarded the item to NCWM recommending it as an Informational Item.



2012 SWMA Annual Meeting: The Committee heard opposition from an industry member and support from a regulatory official. SWMA forwarded the item to NCWM, recommending it as an Informational Item.

2012 NEWMA Interim Meeting: Members expressed concern for additional clutter on retail dispensers. There was also concern that nozzles could end up on products that do NOT match the product being dispensed. One member indicated that the consumer has some responsibility for making the proper product choice when at the dispenser. NEWMA forwarded the item to NCWM

recommending it as an Informational Item.

2013 NCWM Interim Meeting: Ron Hayes, FALS Chairperson, remarked that there is no support in FALS for this item and FALS is recommending it be Withdrawn. The Committee concurs with FALS and Withdrew this item.

2013 CWMA and NEWMA Annual Meetings: Both Associations recommended this item be Withdrawn.

2013 NCWM Annual Meeting: The Committee recommended this item be Withdrawn.

Additional letters, presentations and data may have been part of the Committee's consideration. Please refer to Appendix G of the *Report of the 97th National Conference on Weights and Measures* [SP 1160, 2012] to review these documents.

237-8 I Section 4.3. Dispenser Filters

This appeared as Informational Item 237-8 in the *Committee Reports for the 98th Annual Meeting* (NCWM Publication 16, 2013). At the 2013 NCWM Annual Meeting the Committee modified the status of this item to a Developing Item. This item is now identified at Item 270-4.

237-9 I Section 1. Definitions, Section 2. Standard Fuel Specifications, and Section 3. Classification and Method of Sale of Petroleum Items

Source:

Fuels and Lubricants Subcommittee Task Group (2012)

Purpose:

Update regulations related to flex fuels.

Item Under Consideration:

Section 1. Definitions

1.13. Denatured Fuel Ethanol. – ~~“Ethanol” as defined in Section 1.20. Ethanol. An ethanol blend component for use in gasoline-ethanol blends and Ethanol Flex Fuel. The ethanol is rendered unfit for beverage use by the addition of denaturants under formulas approved by the Alcohol and Tobacco Tax and Trade Bureau (TTB), www.ttb.gov. ASTM D4806, “Standard Specification for Denatured Fuel Ethanol for Blending with Gasolines for Use as Automotive Spark-Ignition Engine Fuel” describes the acceptable denaturants for denatured fuel ethanol to be blended into spark ignition engine fuels.~~
(Amended 20XX)

1.17. ~~E85 Fuel~~ Ethanol Flex Fuel. – ~~A blend~~ Blends of ethanol and hydrocarbons restricted for use as fuel in ground vehicles equipped with flexible-fuel spark-ignition engines, of which the ethanol portion is (nominally 75 to 85 volume percent denatured fuel ethanol).

(Amended 20XX)

1.20. Ethanol. – Also known as ~~“Denatured Fuel Ethanol,”~~ means nominally anhydrous ethyl alcohol meeting ASTM D4806 standards. It is intended to be blended with gasoline for use as a fuel in a spark-ignition internal combustion engine. The denatured fuel ethanol is first made unfit for drinking by the addition of the Alcohol and Tobacco Tax and Trade Bureau (TTB), www.ttb.gov, approved substances before blending with gasoline. “ethyl alcohol.” Ethanol is provided in gasoline-ethanol blends by blending denatured fuel ethanol. See Section 1.13. Denatured Fuel Ethanol.

(Amended 20XX)

1.53. Wholesale Purchaser Consumer. – Any person who is an ultimate ~~gasoline~~ consumer of gasoline, fuel methanol, Ethanol Flex Fuel, fuel ethanol, diesel fuel, biodiesel, biodiesel blends, fuel oil, kerosene, aviation turbine fuels, natural gas, compressed natural gas, or liquefied petroleum gas and who purchases or obtains the product from a supplier and receives delivery of that product into a storage tank.

(Added 1998) (Amended 1999 and 20XX)

Section 2. Standard Fuel Specifications

2.7. Denatured Fuel Ethanol. – Intended for blending with gasoline shall meet the latest version of ASTM D4806, “Standard Specification for Denatured Fuel Ethanol for Blending with Gasolines for Use as Automotive Spark-Ignition Engine Fuel.”

2.10. Ethanol Flex Fuel ~~E85 Fuel~~ Ethanol. – ~~shall meet the latest version of the following ASTM D5798, “Standard Specification for Ethanol Fuel Blends for Flexible-Fuel Fuel Ethanol (Ed75-Ed85) for Automotive Spark-Ignition Engines.”~~ Ethanol Flex Fuel is covered by one of two ASTM standards based on the ethanol concentration of the blend:

- (a) Ethanol Flex Fuel containing 51 to 83 volume percent ethanol shall meet the latest version of ASTM D5798, “Standard Specification for Ethanol Fuel Blends for Flexible-Fuel Automotive Spark-Ignition Engines”; and
- (b) Ethanol Flex Fuel Blends containing 16 to 50 volume percent ethanol shall be blended, stored and conveyed for consumption in accordance with the latest version of ASTM D7794, “Standard Practice for Blending Mid-Level Ethanol Fuel Blends for Flexible-Fuel Vehicles with Automotive Spark-Ignition Engines”

(Added 1997) (Amended 20XX)

Section 3. Classification and Method of Sale of Petroleum Products

3.8. ~~E85 Fuel~~ Ethanol Flex Fuel Blends.

3.8.1. How to Identify ~~E85 Fuel~~ Ethanol Flex Fuel Blends ~~ethanol~~ shall be identified as Ethanol Flex Fuel or EXX Flex Fuel ~~E85~~.

3.8.2. Labeling Requirements.

- (a) Ethanol Flex Fuel with an ethanol concentration no less than 51 and no greater than 83 volume percent shall be labeled “Flex Fuel, minimum 51 % ethanol.” ~~Fuel ethanol shall be labeled with its automotive fuel rating in accordance with 16 CFR Part 306.~~
- (b) Ethanol Flex Fuel with an ethanol concentration less than or equal to 50 volume percent shall be labeled “EXX Flex Fuel, minimum YY % ethanol”, where the XX is the ethanol

concentration in volume percent and YY is XX minus 5. The actual ethanol concentration of the blend shall be XX volume percent plus or minus 5 volume percent.

~~(c)(b)~~—A label shall be posted which states “For Use in Flexible Fuel Vehicles (FFV) Only.” This information shall be clearly and conspicuously posed on the upper 50 % of the dispenser front panel in a type at least 12.7 mm (½ in) in height, 1.5 mm (1/16 in) stroke (width of type). A label shall be posted which states, **“CHECK OWNER’S MANUAL”, in 20 point font “Consult Vehicle Manufacturer Fuel Recommendations,” and shall not be less than 6 mm (¼ in) in height by 0.8 mm (1/32 in) stroke; block style letters** and the color shall be in definite contrast to the background color to which it is applied.

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

Section 4. Retail Storage Tanks and Dispenser Filters

4.1. Water in Gasoline-Alcohol Blends, Biodiesel Blends, ~~E85 Fuel~~ Ethanol Flex Fuel Blends, Aviation Gasoline, and Aviation Turbine Fuel. – No water phase greater than 6 mm (¼ in) as determined by an appropriate detection paste or other acceptable means, is allowed to accumulate in any tank utilized in the storage of gasoline-alcohol blend, biodiesel, biodiesel blends, ~~E85 Fuel~~ **ethanol flex fuel blends**, aviation gasoline, and aviation turbine fuel.

(Amended 20XX)

4.2. Water in Gasoline, Diesel, Gasoline-Ether, and Other Fuels. – Water shall not exceed 25 mm (1 in) in depth when measured with water indicating paste or other acceptable means in any tank utilized in the storage of diesel, gasoline, gasoline-ether blends, and kerosene sold at retail except as required in Section 4.1. Water in Gasoline-Alcohol Blends, Aviation Blends, Biodiesel Blends, ~~E85 Fuel~~ **Ethanol Flex Fuel Blends**, Aviation Gasoline, and Aviation Turbine Fuel.

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

4.3. Dispenser Filters.

4.3.1. Engine Fuel Dispensers.

- (a) All gasoline, gasoline-alcohol blends, gasoline-ether blends, ~~E85 fuel~~ **Ethanol Flex Fuel ethanol**, and M85 methanol dispensers shall have a 10 micron or smaller nominal pore-sized filter.
- (b) All biodiesel, biodiesel blends, diesel, and kerosene dispensers shall have a 30 micron or smaller nominal pore-sized filter.

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

Background/Discussion:

The current wording in NIST Handbook 130 related to fuels restricted to use in Flex Fuel Vehicles should be reviewed. Input gathered from the regional meetings and other stakeholders will be utilized by FALS to develop recommended modifications to NIST Handbook 130.

2011 CWMA and NEWMA Interim Meeting: There were no comments. CWMA and NEWMA forwarded the item to NCWM recommending it as a Developing Item while FALS continues its work.

2011 WWMA Annual Meeting: WWMA forwarded the item to NCWM recommending it as an Informational Item while FALS continues its work.

2011 SWMA Annual Meeting: Mr. Chuck Corr, Chair of the Task Group (TG) under the FALS, gave a presentation on the topic. FALS TG identified several areas where stakeholder input is needed to propose updates to NIST Handbook 130 and to reflect new language in ASTM D5798. No comments were made during the hearing. FALS is expected to have a recommendation for the Interim Meeting. SWMA forwarded the item to NCWM recommending it as a Developing Item.

2012 NCWM Interim Meeting: The Committee received updates on the TG's progress. Mr. Corr will lead an effort to get regional input on a transition and implementation date. The 2012 L&R Committee designated this item as an Informational Item.

2012 NEWMA Annual Meeting: There were no comments. NEWMA recommended that the item remain as an Informational Item.

2012 CWMA Annual Meeting: Mr. Corr gave a presentation on "Flex Fuel Task Force Update" (Flex Fuel Task Group Update). This presentation noted that ASTM standards D7794-12 and D5798-11 cover the standard for a full range of ethanol concentrations. Several commented that the 51 % to 83 % range is too broad. A regulatory official was concerned with blends at the pumps. They can blend and percentage they choose. A stakeholder remarked that consumers are concerned with price and miles per gallon (MPG) and may not have enough knowledge in regards to blends. Another stakeholder remarked that ASTM 5798 is at the terminal and the Conference needs to address this issue. CWMA recommended that the item remain as an Informational Item and that FALS continues its development.

2012 NCWM Annual Meeting: Mr. Corr reported on behalf of FALS TG that approximately 18 areas of NIST Handbook 130 have been identified where modifications may be needed. A stakeholder voiced full support of the TG efforts. Mr. Corr's group will report again at the 2013 NCWM Interim Meeting.

2012 CWMA Interim Meeting: The FALS Task Group chair gave a presentation and would like to present an item to the NCWM L&R that would be ready for voting status at the 2013 NCWM Annual Meeting. He asked for input from regulators on a generic name for flex fuel vehicle fuel, names for individual blends, and labels for blends. The CWMA supports this item and recommends that it remain an Information Item for further development by the FALS TG.

2012 WWMA Annual Meeting: Mr. Corr provided an update on behalf of FALS. Mr. Corr stated that information will be fully developed and released prior to the 2013 NCWM Interim Meeting. The Committee would like to review that information. WWMA recommended that the item be an Informational Item.

2012 SWMA Annual Meeting: Mr. Corr commented as chair of the Fuels and Lubricants Subcommittee Task Group that the group is working on language to reflect to reflect the new ASTM D7794 and recently modified D5798 standards for fuels restricted to flex fuel vehicles. It should be available for review at the Interim. Mr. Russ Lewis (Marathon Petroleum) gave a presentation in support of the proposal, taking into account the recently modified ASTM D5798 "Specifications for Ethanol Fuel Blends for Flexible Fuel Automotive Spark Ignition Engines". Russ provided a copy of newly proposed language to the TG for consideration. SWMA recommended that the item be an Informational Item.

2012 NEWMA Interim Meeting: NEWMA recommended that the item be an Informational Item.

2013 NCWM Interim Meeting: Mr. Corr provided an update of the language changes he is recommending for addressing the full range of fuels restricted to flex fuel vehicles in NIST Handbook 130. Mr. Corr commented that no feedback has been provided to him from stakeholders and states concerning the language changes. Mr. Corr also remarked that the FALS has also not reviewed and discussed the proposed changes. The Committee recommended this as an Informational Item so that interested parties can provide comments.

2013 CWMA and NEWMA Annual Meetings: Both Associations support the on-going work being done by the TG on this item. Both Associations recommend this move forward as an Informational Item.

2013 NCWM Annual Meeting: Mr. Corr provided initial language changes for a Uniform Regulation for the Method of Sale, Section 2.30. ~~E85 Fuel~~ Ethanol Flex Fuel Blends. This language has been placed under the Method of Sale of Commodities and appears as Item 232-6.

Additional letters, presentations and data may have been part of the Committee's consideration. Please refer to Appendix J, *Report of the 97th National Conference on Weights and Measures* [SP 1160, 2012] to review these documents.

260 NIST HANDBOOK 133

260-1 V Section 2.3.8. Moisture Allowance – Pasta Products

(This item was adopted.)

Source:

Southern Weights and Measures Association (2010)

Purpose:

Establish a moisture allowance for macaroni, noodle, and like products (pasta products).

Item Under Consideration:

Amend NIST Handbook 133 as follows:

2.3.8. Moisture Allowances

When no predetermined allowance is found in NIST Handbook 133, the potential for moisture loss must be considered. Inspectors should follow their jurisdiction's guidance for making their determination on an acceptable moisture allowance.

(Added 2010)

If the product tested is subject to moisture loss, provide for the moisture allowance by following one of the two procedures listed below.

2.3.8.1. Applying Moisture Loss before Determining Package Errors

1. Determine the percent value of the moisture allowance if the product is listed below. (See Table 2-3. "Moisture Allowances")

Table 2-3. Moisture Allowances		
Verifying the labeled net weight of packages of:	Moisture Allowance is:	Notes
Flour	3 %	
Dry pet food	3 %	Dry pet food means all extruded dog and cat foods and baked treats packaged in Kraft paper bags and/or cardboard boxes with a moisture content of 13 % or less at time of pack.
<u>Pasta Products</u>	<u>3 %</u>	<u>Pasta products means all macaroni, noodle, and like products packaged in Kraft paper bags, paperboard cartons, and/or flexible plastic bags with a moisture content of 13 % or less at the time of pack.</u>
Borax	See Section 2.4.	
Wet Tare Only¹		
Fresh poultry	3 %	Fresh poultry is defined as poultry above a temperature of – 3 °C (26 °F) that yields or gives when pushed with the thumb.
Franks or hot dogs	2.5 %	
Bacon, fresh sausage, and luncheon meats	0 %	For packages of bacon, fresh sausage, and luncheon meats, there is no moisture allowance if there is no free-flowing liquid or absorbent material in contact with the product and the package is cleaned of clinging material. Luncheon meats are any cooked sausage product, loaves, jellied products, cured products, and any sliced sandwich-style meat. This does not include whole hams, briskets, roasts, turkeys, or chickens requiring further preparation to be made into ready-to-eat sliced product. When there is no free-flowing liquid inside the package and there are no absorbent materials in contact with the product, Wet Tare and Used Dried Tare are equivalent.
<p>¹Wet tare procedures must not be used to verify the labeled net weight of packages of meat and poultry packed at an official United States Department of Agriculture (USDA) facility and bearing a USDA seal of inspection. The Food Safety and Inspection Service (FSIS) adopted specific sections of the 2005 4th edition of NIST HB 133 by reference in 2008 but not the “Wet Tare” method for determining net weight compliance. FSIS considers the free-flowing liquids in packages of meat and poultry products, including single-ingredient, raw poultry products, to be integral components of these products (see Federal Register, September 9, 2008, [Volume 73, Number 175] [Final Rule – pages 52189-52193]).</p>		

(Amended 2010 **and 2013**)

Note: There is no moisture allowance when inspecting meat and poultry from a USDA inspected plant when Used Dry Tare and “Category A” sampling plans are used.

Note: For the Wet Tare Only section of Table 2-3, free-flowing liquid and liquid absorbed by packaging materials in contact with the product are part of the wet tare.

(Added 2010)

2. To compute moisture allowance, multiply the labeled quantity by the decimal percent value of the allowance. Record this value in Box 13a.

Example:

Labeled net quantity of flour is 907 g (2 lb)

Moisture Allowance is 3 % (0.03)

Moisture Allowance = 907 g (2 lb) x 0.03 = 27 g (0.06 lb)

3. If the Moisture Allowance is known in advance (e.g., flour, **pasta products** and dry pet food), it can be applied by adjusting the Nominal Gross Weight used to determine the sample package errors. The Moisture Allowance in Box 13a is subtracted from the Nominal Gross Weight to obtain an Adjusted Nominal Gross Weight which is entered in Box 14. The Nominal Gross Weight is defined in Section 2.3.6.1. as the sum of the Labeled Weight and the Average Tare Weight from Box 13.

Example:

Use a Labeled Weight of 907 g (2 lb) and an Average Tare Weight of 14 g (0.03 lb)

The calculation is:

Labeled Net Quantity of Contents 907 g (2 lb) + Average Tare Weight 14 g (0.03 lb) = 921 g (2.03 lb) – Moisture Allowance 27 g (0.06 lb) = Adjusted Nominal Gross Weight of 894 g (1.97 lb)

This result is entered in Box 14.

4. Determine package errors by subtracting the Adjusted Nominal Gross Weight from the Gross Weights of the Sample Packages.

Example:

The calculation is:

Gross Weight of the Sample Packages – Adjusted Nominal Gross Weight = Package Error

Note: When the Nominal Gross Weight is adjusted by subtracting the Moisture Allowance value(s) the Maximum Allowable Variation (s) is not changed. This is because the errors that will be found in the sample packages have been adjusted by subtracting the Moisture Allowance (e.g., 3 %) from the Nominal Gross Weight. That increases the individual package errors by the amount of the moisture allowance (e.g., 3 %). If the value(s) of the MAV(s) were also adjusted it would result in doubling the allowance. MAV is always based on the labeled net quantity.

(Added 2010)

2.3.8.3. Moisture Allowance Gray Area

When the average error of a lot of fresh poultry, franks, or hot dogs, **pasta products** is minus but does not exceed the established “moisture allowance” or “gray area,” contact the packer or plant management personnel to determine what information is available on the lot in question. Questions to the plant management representative may include:

- Is a quality control program in place?

- What information is available concerning the lot in question?
- If net weight checks were completed, what were the results of those checks?
- What adjustments, if any, were made to the target weight?

Note: If the plant management has data on the lot, such data may help to substantiate that the “lot” had met the net content requirements at the point of manufacture.

This handbook provides “moisture allowances” for some meat and poultry products, flour, **pasta products**, and dry pet food. These allowances are based on the premise that when the average net weight of a sample is found to be less than the labeled weight, but not by an amount that exceeds the allowable limit, either the lot is declared to be within the moisture allowance or further investigation can be conducted.

Reasonable variations from net quantity of contents caused by the loss or gain of moisture from the package are permitted when caused by ordinary and customary exposure to conditions that occur under good distribution practices. If evidence is obtained and documented to prove that the lot was shipped from the packaging plant in a short-weight condition or was distributed under inappropriate or damaging distribution practices, appropriate enforcement action should be taken.

Background/Discussion:

Studies indicate that moisture loss for pasta products is reasonably predictable over time. Pasta exhibits consistent moisture loss in all environments and packaging, which can vary more than 4 % due to environmental and geographic conditions. Although it eventually reaches equilibrium with the surrounding atmosphere, because it is hygroscopic, this balance does not occur until long after packaging and shipping.

2010 Interim Meeting: The Committee heard support for this item from industry and stakeholders. This item would amend the Moisture Allowance Table in NIST Handbook 133 giving pasta a 3 % moisture allowance. The Committee reviewed the submitted study (refer to the *Report of the 95th National Conference on Weights and Measures* [SP 1115, 2010]). The 2010 L&R Committee designated this item as a Voting Item.

2010 NEWMA Annual Meeting: A representative of the pasta industry gave the group an explanation of the item and expressed support for this item as written. NEWMA also supported this item.

2010 CWMA Annual Meeting: A representative from the National Pasta Association (NPA) stated the data supports the 3 % moisture allowance. An official commented that testing in their state does not support the proposal. An industry representative stated that guidance is needed for an established moisture allowance and currently there are no guidelines to establish the moisture loss percentage.

2010 NCWM Annual Meeting: A representative for the NPA spoke on behalf of the proposal. This item would allow for a specific moisture loss percentage to be taken. Inspectors would have a specific number that they can apply to the pasta product. Representatives of several pasta companies spoke in support of this item stating that it is consistent with numerous studies that have been done. An official opposed this item since pasta is known to have moisture loss due to the type of product it is. He further explained that applying a blanket 3 % moisture loss does not make sense, what may be good in Florida may not be good in New Mexico. Another official stated that applying the 3 % does not stop an inspector from going into a distribution or point of pack to inspect; especially if the inspectors believe the packer is under filling packages. He urged that this proposal be supported to provide a tool. Another official voiced support because it is important to recognize guidelines for consideration. A pasta association representative also agreed that this work goes back a couple of decades and several studies were provided for consideration. Another representative explained that they pack to net weight. Pasta contains 10 % to 13 % moisture; if the moisture standard is lowered the product falls apart along with the product quality. There was a split vote on this item at the 2010 Annual Meeting, and it was returned to the Committee.

2010 CWMA Interim Meeting: An official provided information regarding informal testing of pasta products in their state. The concern is that pasta can gain moisture as well as lose moisture; therefore, they oppose a national

moisture allowance for pasta products. It was further explained that moisture loss/gain seems to be dependent upon the type of packaging used. This official also commented that product is no longer warehoused for long periods of time, and it is mostly in climate controlled stores, which would prevent the need for a moisture allowance. Another official agreed that a national standard may not be appropriate due to humidity differences from state to state. CWMA recommended that the item be Withdrawn.

2010 WWMA Annual Meeting: An official expressed support for adopting a 3 % moisture allowance for pasta citing the significant work done and data provided by the NPA. The Committee recommended that any additional data from studies be provided for review. WWMA recommended that the item remain as a Voting Item.

2010 SWMA Annual Meeting: There were no comments on this item. SWMA recommended that the item be Withdrawn; however, if further studies are developed, then this should be taken into consideration.

2010 NEWMA Interim Meeting: Attendees expressed strong reservations about this proposal. Comments were heard regarding industry practices in regards to moisture loss when packing and if there is a need to codify the moisture loss allowance at all. A member commented that if this proposal passed, other industries would now approach the Conference and ask for specific moisture allowances for their products. NEWMA recommended that the item be Withdrawn.

2011 NCWM Interim Meeting: An overview was presented by the NPA regarding the history and studies that have been performed in regard to moisture loss of pasta. Pasta is a hygroscopic product and changes in moisture content in the product may occur in the package due to atmospheric changes (refer to Appendix I, *Report of the 96th National Conference on Weights and Measures* [SP 1125, 2011]). Hot, dry, and air conditioned store environments have less humidity and will pull moisture from the product. Conversely, in tropical, wet and high humidity environments (seldom seen in U.S. stores) the product will pull moisture in. According to Ms. Hoover (American Italian Pasta Company), companies do pack to the law and have documented weight control programs. The 2011 L&R Committee designated this item as a Voting Item.

2011 NCWM Annual Meeting: The NPA gave a presentation with background information and a brief legal overview on moisture loss. NPA also distributed a page with frequently asked questions and a follow-up study (refer to Appendix I, *Report of the 96th National Conference on Weights and Measures* [SP 1125, 2011]) that occurred in 2006 - 2007 that shows a 2.5 % to 5 % moisture loss. Pasta consists of flour and water. Handbook 133 stipulates a 3 % moisture allowance for flour. Pasta is packaged in either breathable film or paperboard cartons. This allows for the pasta to breathe and not mold. The industry is requesting that this proposal be adopted by the Conference to give officials the guidance that is needed when performing inspections. On a split Vote this item was returned to the Committee.

2011 CWMA Interim Meeting: An industry representative stated that a uniform procedure for moisture loss is needed. Although difficult, we can develop a surrogate that can be easily used by manufacturers and easily verified by weights and measures and recommended this item be Withdrawn. The Committee disagreed and believes that moisture loss is a legitimate issue and deserves consideration by NCWM. CWMA recommended that the item remain as a Voting Item.

2011 WWMA Annual Meeting: A state official requested additional information concerning good manufacturing and distribution processes. The Committee firmly believed that enough data had been established by industry to address questions regarding moisture allowances with pasta and pasta products. WWMA recommended that the item remain as a Voting Item.

2011 NEWMA Interim Meeting: NEWMA continued to oppose this item. NEWMA recommended that the item be Withdrawn.

2011 SWMA Annual Meeting: No comments were heard. The Committee noted that it appears as if proper protocol has been followed by the pasta industry. If states do not support the item, SWMA recommends that they provide the reasons so their issue(s) can be addressed. SWMA recommended that the item remain as a Voting Item.

2012 NCWM Interim Meeting: The Committee reviewed documents received from the NPA. A representative with the American Italian Pasta Company supported the language as presented. An official who has an active package inspection program remarked that a significant amount of data has been provided by the NPA. The 2012 L&R Committee designated this item as a Voting Item.

2012 NEWMA Annual Meeting: Ms. Jayne Hoover (American Italian Pasta Company) gave a presentation on the development of this topic and the extensive national testing and data collection which was done. One member indicated that it was a good objective and did not see a reason to oppose it. Several others voiced their historical opposition to moisture allowance. On a split vote, NEWMA recommended that the item remain as a Voting Item.

2012 CWMA Annual Meeting: A representative from the NPA and American Italian Pasta Company addressed the top five frequently asked questions which are: 1) 3 % gray area (gray area is not a tolerance), 2) current data on product (2006 - 2007 study of over 700 samples), 3) why 3 %, 4) what causes variability (there are over 500 shapes of pasta and 3000 SKUs), and 5) regulatory standardization. Three regulatory officials spoke in opposition to the item. Several others spoke in favor, commenting that officials are required to recognize reasonable moisture loss and pasta rehydrates during cooking so there is no loss to the consumer. One regulator asked for clarification on why moisture loss appears to level out at six months. The NPA representative explained that different pastas have different moisture loss due to their shapes and size. CWMA recommended that the item remain as a Voting Item.

2012 NCWM Annual Meeting: Ms. Hoover provided an overview on gray area, current data, and variability. She stressed the need for uniformity in the marketplace. Another pasta representative remarked that Congress established that it is important to keep in mind the gray area. The gray area is not a tolerance and moisture loss does not cause the product to be short weight. Several regulatory officials spoke in support of this item. Two spoke in opposition, noting that moisture loss should be dealt with on a case-by-case basis. On a split vote, the item was returned to the Committee.

2012 CWMA Interim Meeting: A regulatory official recommended withdrawing the item. It has been voted on twice at NCWM, and both votes were split votes. Another recommended it be a Voting Item because some states did not realize that abstaining from the vote was tantamount to a no vote. No CWMA officials planned to change their vote. Another official recommended that it move forward as a Voting Item, stating that the industry had submitted a complete proposal that justified the moisture allowance. The item was fully developed with supporting data that justified the moisture allowance. Those states that abstained in the 2012 NCWM meeting should be given an opportunity to vote on this item. CWMA supported the item and recommended that the item be a Voting Item.

2012 WWMA Annual Meeting: Five regulatory officials commented in support of the item. NPA has met all requests to provide documented data that supported initial studies on moisture loss. The data demonstrated that a 3 % moisture allowance is appropriate. Under federal law moisture loss must be recognized and adoption of this item would provide a moisture allowance for inspectors when testing pasta products. Comments stressed that a moisture allowance should be adopted to provide guidance to the pasta industry and to regulatory officials regarding package content compliance testing and enforcement. No evidence or data has been presented at any of the regional associations and NCWM meetings to contradict NPA's data presented. The Committee recognized the cooperation by the pasta industry members to comply with NCWM's request to demonstrate the appropriateness of the proposed 3 % moisture allowance. The Committee supported the item, but expressed concern that it has not advanced because of a split vote for several years. The Committee suggested that the NCWM L&R Committee make this a priority item for the Moisture Allowance Work Group. In addition to the NPA study data, the Committee would have preferred an independent study from outside sectors. The Committee recognizes that additional data and studies may be available. If there is other data available that contradicts or supports NPA's data, individuals are urged to submit it to the NCWM for consideration. WWMA recommended that the item be a Voting Item.

2012 SWMA Annual Meeting: The Committee believed the pasta industry has presented the necessary data needed by the NCWM to make a decision. SWMA recommended that the item be a Voting Item.

2012 NEWMA Interim Meeting: NEWMA members stated that sufficient work has been done on this topic and that more than enough data has been submitted to support the proposal. NEWMA members who had previously opposed the item stated that it now has their support. NEWMA recommended that the item be a Voting Item.

2013 NCWM Interim Meeting: Ms. Maile Hermida (Hogan Lovells, US, LLP) remarked that the NPA supports this item due to the strong underlying data that supports the proposal. Mr. Kurt Floren (Los Angeles County, California) commented that this item remained on the agenda due to a split vote at the 2012 NCWM Annual Meeting. Under federal law you must allow for reasonable moisture loss. Mr. Floren would like to hear the reasons as to why states oppose this item. Several states spoke up in support of the item. The Committee recommends this as a Voting item.

2013 CWMA Annual Meeting: A state regulator provided data on a study performed by his state which corroborates evidence that a moisture reduction of 3 % is reasonable. The Committee believes the data presented by industry and the state supports the 3 % grey area. The Committee recommends this be a Voting Item.

2013 NEWMA Annual Meeting: The Committee believes that sufficient work has been done and supports this item as a Voting Item.

2013 NCWM Annual Meeting: There was testimony heard during open hearings stating there is support to move this item forward. The Committee recommended the item be presented for a Vote as shown in the Item Under Consideration.

Additional letters, presentations and data may have been part of the Committee's consideration. Please refer to Appendix K, *Report of the 97th National Conference on Weights and Measures* (SP 1160, 2012) to review these documents.

260-2 V Section 3.10. Animal Bedding

This appeared as Voting Item 260-2 in the *Committee Reports for the 98th Annual Meeting* (NCWM Publication 16, 2013). At the 2013 NCWM Annual Meeting the Committee modified the status of this item to a Developing Item. This item is now identified as Item 270-6.

260-3 W Gravimetric Testing of Printer Ink and Toner Cartridges

(This item was withdrawn.)

Source:

WWMA (2013)

Purpose:

Provide a test procedure in NIST Handbook 133 for gravimetric testing of printer ink and toner cartridges.

Item Under Consideration:

None.

Background/Discussion:

The Laws and Regulations Committee received a proposal in 2010 to create a uniform method of sale for printer ink and toner cartridges. See the related item in the 232 Series of this report for more detail and background discussion.

A Task Group was formed to address the method of sale, but was unable to reach consensus. In 2012, the Task Group was replaced with a new one that was charged to develop Handbook 133 gravimetric test procedures to verify net contents of ink and toner cartridges. The Committee agreed to keep the original Method of Sale item as an Informational Item until the second Task Group completes its recommendations.

2012 WWMA Annual Meeting: Mr. Paul Jeran expressed concern with the concept of providing a tare weight on package labels because his company has over 30 million items and believes the test method under consideration may not be appropriate. In reviewing the background discussion of the 232 Series Method of Sale Item, the Committee recommends that NCWM give careful consideration to industry concerns. WWMA recommended that the item remain as a Developing Item.

2013 NCWM Interim Meeting: Ms. Judy Cardin, Printer Ink and Toner Cartridge Gravimetric Package Testing Task Group Chair provided a presentation on the work of the task group (refer to Item 232-4). Ms. Cardin also provided a marketplace survey that reflected “count” was the most common quantity statement being used. It was requested of industry the feasibility to place the tare weight on cartridges. This was not practicable due to cartridge parts being manufactured domestically and internationally and may not always be made of the same material. The presentation also reflected an in-house test using a gravimetric procedure. It was determined by the Task Group that there is not a practical test procedure. The L&R Committee Withdrew this item in its entirety.

Additional letters, presentations, and data may have been part of the Committee’s consideration. Please refer to Appendix C, *Report of the 97th National Conference on Weights and Measures* (SP 1160, 2012) to review these documents.

260-4 V Section 4.3. Paper Plates and Sanitary Paper Products

This appeared as Voting Item 260-4 in the *Committee Reports for the 98th Annual Meeting* (NCWM Publication 16, 2013). At the 2013 NCWM Annual Meeting, the Committee modified the status of this item to a Developing Item and is now identified as Item 270-5.

270 OTHER ITEMS – DEVELOPING ITEMS

The Committee Chair has the discretion as to whether or not to take comments on Developing Items during Committee open hearings based on factors such as the amount of time remaining to cover Committee Agenda item.

270-1 D Fuels and Lubricants Subcommittee

Source:

The Fuels and Lubricants Subcommittee (2007)

Purpose:

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

Item Under Consideration:

This item is under development. All comments should be directed to Mr. Ronald Hayes, FALS Chair, at (573) 751-4316, ron.hayes@mda.mo.gov, or Mr. David Sefcik, NIST Technical Advisor at (301) 975-4868, dsfcik@nist.gov.

Background/Discussion:

The Subcommittee met on January 24, 2007, at NCWM Interim Meeting to undertake a review of a number of significant issues related to fuel standards. Their first project was to undertake a major review and update of the Uniform Engine Fuels, Petroleum Products, and Automotive Lubricants Regulation in NIST Handbook 130. The Subcommittee also met at the 2007 NCWM Annual Meeting and continued its work on a number of items in addition to preparing a major revision of the Fuel Ethanol Specifications.

An additional project will be to update and possibly expand the Basic Engine Fuels, Petroleum Products, and Lubricants Laboratory Publication. The Subcommittee will undertake other projects as time and resources permit.

Additional background/history, letters, presentations, and data may have been part of the Committee’s consideration. Please refer to Laws and Regulations Committee, *Report of the 97th National Conference on Weights and Measures* (SP 1160, 2012) to review these documents.

270-2 D Packaging and Labeling Subcommittee

Source:

Packaging and Labeling Subcommittee (2011)

Purpose:

Provide notice of formation of a new Subcommittee reporting to the L&R Committee.

Item Under Consideration:

None

Background/Discussion:

2011 NCWM Interim Meeting: The PALS met for the first time to discuss ongoing issues and agenda items in regards to packaging and labeling regulations. There were 11 attendees that represented industry, state and county regulatory officials, and the NIST Technical Advisor.

The mission of PALS is to assist the L&R Committee in the development of agenda items related to packaging and labeling. The Subcommittee will also be called upon to provide important and much needed guidance to the regulatory and consumer packaging communities on difficult questions. PALS will report to NCWM L&R Committee. The NIST Technical Advisor reported that FTC will do a review of FPLA in 2013. The 2011 L&R Committee designated this item as a Developing Item and assigned its development to PALS.

2011 CWMA Interim Meeting: The PALS Chair stated the goal is to be active before the 2012 NCWM Interim meeting and stated there is a need to prioritize labeling issues. No action was needed. CWMA recommended that the item remain as a Developing Item.

2012 NCWM Interim Meeting: PALS met to discuss its formation and strategy. The NCWM Chairman will appoint eight voting members on the Committee to consist of four regulatory officials (one from each region) and four from industry (two retailers and two manufacturers). Mr. Christopher Guay (Procter and Gamble), PALS Chair, reported that work will be done through webinar meetings to be held approximately four times a year. PALS members will be responsible for providing updates at their regional meetings and to seek input into issues. Mr. Guay added that PALS will be developing proposals and providing guidance and recommendations on existing proposals as assigned by the NCWM L&R Committee. He also stressed the need and importance of having key federal agencies (FDA, FTC, and USDA) participating. The NIST Technical Advisor commented that FTC announced that they will review the FPLA in 2013. The 2012 L&R Committee designated this item as a Developing Item and assigned its development to PALS.

2012 NCWM Annual Meeting: Mr. Guay reported the Subcommittee is considering further development of the following items:

- **Additional Net Content Declarations on the Principal Display Panel** – Package net contents are most commonly determined by the product form, for example, solid products are labeled by weight and liquid products are labeled by volume. Semi-solid products such as pastes, creams and viscous liquids are required to be labeled by weight in the United States and by volume in Canada.
- **Icons in Lieu of Words in Packaged labeled by Count** – Can a clear and non-misleading icon take the place of the word “count” or “item name” in a net content statement? While existing Federal regulation requires regulatory label information to be in “English,” the increasing presence of multilingual labels and the growing diversity of the U.S. population suggest more consumers are served with a clear and non-misleading icon.
- **Multilingual Labels**
- **Multipacks and Bundle Packages** – The net content statements for multipacks and bundled packages of individually labeled products can be different based on the approach used to calculate them. The difference

is the result of the degree of rounding for dual inch-pound and metric declarations. Using two apparently valid but different methods can yield one net content statement result that provides more accuracy between the metric and inch-pound declarations and a different net content result, which is consumer friendly.

2012 SWMA Annual Meeting: Mr. Guay stated Item 231-1 has been assigned to PALS for a recommendation. PALS is working on a series of principles and recommendations regarding claims and statements made on packages outside of quantity statement (i.e., supplemental, quality, and performance claims) on what is appropriate and what is not. PALS will recommend that Item 231-1 be Withdrawn. PALS is also looking at whether icons are appropriate as part of a quantity statement and how labeling of products with multilingual labels can be simplified. SWMA recommended that the item remain as a Developing Item.

2013 NCWM Interim Meeting: Mr. James Kohm (Director of Enforcement at the Federal Trade Commission [FTC]), briefed NCWM on the goals and objectives of FTC. Mr. Kohm gave a general overview of the Fair Packaging and Labeling Act (FPLA) and announced that it is under review in 2013.

Mr. Guay provided an update on the action of PALS. PALS will be focusing on best practice principles for the various quantity and quality statements seen in the marketplace. PALS will also continue to work on the items addressed at the 2012 Annual Meeting.

Additional letters, presentations, and data may have been part of the Committee's consideration. Please refer to *Report of the 97th National Conference on Weights and Measures* (SP 1160, 2012) to review these documents.

270-3 D Moisture Allowance Task Group (MATG)

Source:

Moisture Allowance Task Group (2012)

Purpose:

Provide notice of formation of a new Task Group reporting to the Committee. This Task Group will provide additional guidance for making moisture allowances for products not listed in NIST Handbook 133.

Item Under Consideration:

None

Background/Discussion:

2012 NCWM Interim Meeting: Ms. Judy Cardin, Committee Chair, will be requesting that the NCWM Board of Directors form a new Task Group to review moisture allowance. The 2012 L&R Committee designated this item as a Developing Item.

2012 NCWM Annual Meeting: Mr. Kurt Floren (Los Angeles County, California) announced that he will Chair the Moisture Allowance Task Group.

2012 WWMA Annual Meeting: Mr. Floren remarked that he is actively seeking individuals with expertise in moisture allowance. WWMA recommended that the item remain as a Developing Item.

2012 SWMA Annual Meeting: The Committee supported the formation of the Moisture Loss Work Group. SWMA recommended that the item remain as a Developing Item.

2013 NCWM Interim Meeting: Kurt Floren, MATG Chairperson announced that he is still seeking a representative from each region for the MATG. He would prefer to have a representative from each region. Currently the following have regions have provided a representative; NEWMA, Frank Greene, (Connecticut) and WWMA, Mr. Brett Gurney (Utah). The following individuals have also expressed interest: Ms. Maile Hermida (Hogan Lovells US, LLP), Ms. Ann Boeckman (Kraft Foods Group), Mr. Pete O'Bryan (Foster Farms), Mr. Chris Guay (Procter and Gamble Co.). Mr. Floren remarked that meetings will be held via web-meetings and at the NCWM Conferences.

Anyone interested in assisting with the work should contact Mr. Kurt Floren, Moisture Allowance Task Group (MATG) Chairperson at (626) 575-5451 or kfloren@acwm.lacounty.gov or Ms. Lisa Warfield, NIST Technical Advisor at (301) 975-3308 or lisa.warfield@nist.gov.

Additional letters, presentations, and data may have been part of the Committee's consideration. Please refer to *Report of the 97th National Conference on Weights and Measures* (SP 1160, 2012) to review these documents.

270-4 D Handbook 130, Engine Fuels and Automotive Lubricants, Section 4.3. Dispenser Filters

This appeared as Informational Item 237-8 in the *Committee Reports for the 98th Annual Meeting* (NCWM Publication 16, 2013).

Source:

Missouri Department of Agriculture (2012)

Purpose:

Recognize the need for 10-micron or smaller nominal pore-sized filters for today's diesel engines.

Item Under Consideration:

4.3. Dispenser Filters.

4.3.1. Engine Fuel Dispensers.

- (a) All gasoline, gasoline-alcohol blends, gasoline-ether blends, biodiesel, biodiesel blends, diesel, E85 fuel ethanol, and M85 methanol dispensers shall have a 10 micron or smaller nominal pore-sized filter.
- (b) All ~~biodiesel, biodiesel blends, diesel, and~~ kerosene dispensers shall have a 30 micron or smaller nominal pore-sized filter.

Background/Discussion:

Abnormal dispenser filter plugging at retail will alert the retailer of potential storage tank problems. Requiring 10-micron filters for all products will reduce the inventory and the potential of installing the wrong filter for all products at the same site.

2011 CWMA Interim Meeting: An official commented that a smaller porosity filter may be acceptable but for now this is a reasonable start. CWMA forwarded the item to NCWM recommending it as a Voting Item.

2011 WWMA Annual Meeting: Need was expressed for more technical information and there were concerns that the flow rate would be diminished, the size of the filter may need to increase, and coupled with biodiesel it would tend to clog the filter in colder climates. Because of these reasons the Committee did not believe there was sufficient data to justify addressing this issue. WWMA did not forward the item to NCWM and recommended that the submitter provide additional studies and technical documents to support this proposal.

2011 NEWMA Interim Meeting: Questions were raised as to whether or not "measurement" of filter content was within the ability of weights and measures officials. It was noted that better filters may enhance fuel quality. The Committee believes that the proposal has potential, given input from industry and NCWM members. NEWMA forwarded the item to NCWM recommending it as a Developing Item.

2011 SWMA Annual Meeting: An industry representative stated that standard retailer dispensers use a 10-micron filter, and high capacity dispensers use 30-micron filters (i.e., diesel dispensed at truck stops). The company's engineers have determined that reducing a 30-micron filter to a 10-micron filter will drastically reduce flow rate to trucks. Another industry representative agreed and re-iterated that truck stops would see a tremendous reduction in flow. The Committee believed this proposal was not practical and would have a negative impact and undue burden on the trucking industry. SWMA did not forward the item to NCWM.

2012 NCWM Interim Meeting: Mr. Ron Hayes, FALS Chair, informed the Committee that FALS recommended that this item be Informational because of industry concerns that 10-micron filters would be too restrictive of flow in high-flow systems. One industry representative expressed opposition for the use of 10-micron filters and recommends this item to be Withdrawn. A representative of an automobile manufacturer claimed diesel passenger vehicles do not have the sophisticated filtration systems commonly found on commercial duty vehicles and 10-micron filters on dispensers are needed for protection from particulate contamination. As proposed, this item could cause clogging of diesel dispenser filters in colder climates. The Committee believes this item has merit but lacks a consensus and also believes that FALS needs to address these concerns. The 2012 L&R Committee designated this item as an Informational Item and assigned it to FALS for further development.

2012 NCWM Interim Meeting: It was apparent to the Committee that there are many unresolved issues related to passenger vehicles. The Committee encourages the FALS to continue developing this item.

2012 NEWMA and CWMA Annual Meetings: Both Associations supported this item and recommended that the item be a Voting Item.

2012 NCWM Annual Meeting: Several stakeholders spoke in opposition on this item. Mr. Hayes remarked that the FALS worked on this item in 2007 and believes FALS needs to continue to work on this item. The NCWM L&R Committee agreed that this item is not ready and supports the continued development by FALS.

2012 CWMA Interim Meeting: General Motors (GM) supported this item for passenger vehicles, as these vehicles now have 4-micron filters. A state official commented that the CWMA had recommended modifying the language in this item to state that the 10-micron filter requirement would only apply to passenger type vehicles, and would specifically exempt high flow rate meters such as truck stop meters. CWMA supported this item provided that the earlier proposal be presented to limit the 10-micron filters to passenger vehicle meters and to specifically exempt high flow rate meters. CWMA recommended that this version of the item be a Voting Item.

2012 WWMA Annual Meeting: Mr. Gordon Johnson (Gilbarco) opposed the item because reducing a 30-micron filter to a 10-micron filter would drastically reduce flow rate to large capacity over-the-road trucks. The Committee did not believe that this issue falls within the scope of weights and measures and, therefore, would be unenforceable. No comments were received to support the item. WWMA recommended that this item be Withdrawn.

2012 SWMA Annual Meeting: An industry representative commented that the current technology to put a 10-micron filter on diesel at a truck stop will prohibit fuel from being dispensed in a timely manner and, therefore, opposes this. The Committee recommended that use of 10-micron filters be limited to passenger vehicle meters, and to specifically exempt high flow rate meters. SWMA recommended that the item be a Voting Item but with the changes as described by the Committee.

2012 NEWMA Interim Meeting: NEWMA reviewed comments from the CWMA meeting. NEWMA recommends review by the Fuels and Lubricants Subcommittee. NEWMA recommended that the item be an Informational Item.

2013 NCWM Interim Meeting: Mr. Hayes (FALS Chair) remarked that a similar item was brought before the Committee in 2007. FALS did not have enough time in their work session to work on this item. There are several stakeholders and states that are having issues with the terminology and would like it removed from the agenda. Mr. Hayes (Missouri) remarked that they supported this item because contamination is an issue with cars that do not have filtering systems. The Committee reviewed comments from the Regional Associations; however, FALS did not have sufficient time review and consider recommendation to the Committee. The Committee would like for FALS to continue to work on this item and is proposing this as an Informational Item.

2013 CWMA Annual Meeting: Several industry representatives did not support this item for they believe this was more of a dispenser protection issue than a consumer protection issue. A state regulator remarked it is a fuel quality issue to protect the consumer's vehicles and fuels systems such as high pressure fuel rails on newer diesel vehicles. This would not apply to high-flow diesel dispensers

2013 NEWMA Annual Meeting: The Committee proposes this item be Withdrawn.

2013 NCWM Annual Meeting: Mr. Hayes (FALS Chair) requested that the Committee allow the Subcommittee to continue to work on a recommendation for this item. There was opposition on moving this item forward. In less than two years since this proposal came forward, there has been no data developed. The Committee reviewed the association reports, Open Hearing comments, and letters received and changed the status of this item to Developing.

Additional letters, presentations, and data may have been part of the Committee's consideration. Please refer to Appendix F in the *Report of the 97th National Conference on Weights and Measures* (SP 1160, 2012) and Appendix G in this report (*Report of the 98th National Conference on Weights and Measures [2013]*) to review these documents.

270-5 D Handbook130, Section 4.3. Paper Plates and Sanitary Paper Products

Source:

Georgia Pacific (2013)

Purpose:

Add a more accurate and reproducible test method for verifying dimensions of disposable plates, bowls, and platters.

Item Under Consideration:

Amend NIST Handbook 133 as follows:

This appeared as Voting Item 260-4 in the *Committee Reports for the 98th Annual Meeting* (NCWM Publication 16, 2013).

4.3. Paper Plates and Sanitary Paper Products

The following procedure is used to verify the size of paper plates and other sanitary paper products. It may also be used to verify the size declarations of other disposable dinnerware.

Note: Do not distort the item's shape during measurement.

The count of sanitary paper products cannot be adequately determined by weighing. Variability in sheet weight and core weight requires that official tests be conducted by actual count. However, weighing can be a useful audit method. These products often declare total area as well as unit count and sheet size. If the actual sheet size measurements and the actual count comply with the average requirements, the total area declaration is assumed correct.

4.3.1. Test Equipment

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

➤ Metric Units:

For labeled dimensions 40 cm or less, linear measure: 30 cm in length, 1 mm divisions; or a 1 m rule with 0.1 mm divisions, overall length tolerance of 0.4 mm.

For labeled dimensions greater than 40 cm, 30 m tape with 1 mm divisions.

➤ Inch-pound Units:

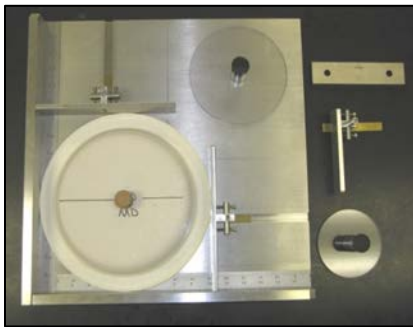
For labeled dimensions 25 in or less, use a 36 in rule with $\frac{1}{64}$ in or $\frac{1}{100}$ in divisions and an overall length tolerance of $\frac{1}{64}$ in.

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

- Measuring Base.

Note: A measuring base may be made of any flat, sturdy material approximately 38 cm (15 in) square. Two vertical side pieces approximately 3 cm (1 in) high and the same length as the sides of the measuring base are attached along two adjoining edges of the measuring base to form a 90° corner. Trim all white borders from two or more sheets of graph paper (10 divisions per centimeter or 20 divisions per inch). Place one sheet on the measuring base and position it so that one corner of graph paper is snug in the corner of the measuring base and vertical sides. Tape the sheet to the measuring base. Overlap other sheets on the first sheet so that the lines of top and bottom sheet coincide, expanding the graph area to a size bigger than plates to be measured; tape these sheets to the measuring base. Number each line from the top and left side of base plates: 1, 2, 3, etc.

- **Plate Dimension Tester**



4.3.2. 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. Select an initial tare sample according to Section 2.3.5.1. “Determination of Tare Sample and Average Tare Weight.”
3. Open each package and select one item from each.

Note: Some packages of plates contain a combination of different-sized plates. In this instance, take a plate of each declared size from the package to represent all the plates of that size in the package. For example, if three sizes are declared, select three different plates from each package.

Note: Occasionally, packages of plates declared to be one size contain plates that can be seen by inspection to be of different sizes in the same package. In this instance, select the smallest plate and use the methods below to determine the package error. If the smallest plate is not short measure by more than the MAV, measure each size of plate in the package and calculate the average dimensions.

Example:

If five plates measure 21.41 cm (8.43 in) and 15 measure 21.74 cm (8.56 in), the average dimension for this package of 20 plates is 21.66 cm (8.53 in).

4. For paper plates **bowls or platters**: Place each item on the **plate dimension tester or** measuring base plate (or use the linear measure) with the eating surface down so two sides of the plate touch the sides of the **plate dimension tester or** measuring base. **If using the plate dimension tester, follow the test procedure for determining the plate, bowl or platter size.**

5. For other products: Use either the measuring base or a linear measure to determine actual labeled dimensions (e.g., packages of napkins, rolls of paper towels). If testing folded products, be sure that the folds are pressed flat so that the measurement is accurate.
6. If the measurements reveal that the dimensions of the individual items vary, select at least 10 items from each package. Measure and average these dimensions. Use the average dimensions to determine package error in Step 7 below.
7. The package error equals the actual dimensions minus the labeled dimensions.

4.3.3. Evaluation of Results

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

Background/Discussion:

NIST Handbook 133, Section 4.3. Paper Plates and Sanitary Paper Products, identifies “Metric” and/or “Inch-Pound” steel tapes and rules or a “measuring base” as acceptable equipment for doing dimensional evaluations of paper plates and sanitary paper products. This proposal would add another acceptable piece of equipment that we call the ‘Plate Dimension Tester.’”

It is simpler, faster, and easier for an operator, technician, or regulator to use, and it is or more accurate and reproducible than the existing acceptable equipment listed in NIST Handbook 133, Section 4.3. Paper Plates and Sanitary Paper Products. For most products of this type (11.8 in or less) the current metric rule is identified as a 30 mm rule in 1 mm divisions (0.039 in), or a 1 m rule with 0.1 mm divisions (0.0039 in), and the inch-pound rule is a 36 inch rule with $\frac{1}{64}$ or $\frac{1}{100}$ divisions (0.015 in or 0.01 in). The acceptable divisions are somewhat different. The proposed tester uses a certified steel rule with divisions of 0.02 in that falls within the range of acceptable rules already listed in Section 4.3. Paper Plates and Sanitary Paper Products.

The measuring base described as acceptable uses graph paper with divisions of 0.05 in. That measuring base is described and constructed as follows:

A measuring base may be made of any flat, sturdy material approximately 38 cm (15 in) square. Two vertical side pieces approximately 3 cm (1 in) high and the same length as the sides of the measuring base are attached along two adjoining edges of the measuring base to form a 90 degree corner. Trim all white borders from two or more sheets of graph paper (10 divisions per centimeter or 20 divisions per in). Place one sheet on the measuring base and position it so that one corner of graph paper is snug in the corner of the measuring base and vertical sides. Tape the sheet to the measuring base. Overlap other sheets on the first sheet so that the lines of top and bottom sheet coincide, expanding the graph area to a size bigger than plates to be measured; tape these sheets to the measuring base. Number each line from the top and left side of base plates: 1, 2, 3, etc.

The submitter believes the accuracy of cutting the borders off the edges of graph paper, aligning the graph paper lines to match, and then taping them in place leaves a lot to be desired for accuracy when gathering data; especially when the expectations require the values to be read to such small increments. The plates need to touch the two sides of the measuring base, which require holding the plate flat against the measuring base and changes in that pressure can alter the values. The process of using rules can also cause problems when the plate edge must be perfectly aligned with the edges of the rule and then to make sure you have measured both directions in a perfect 90 degree angle. We, therefore, developed the Plate Dimension Tester to solve all those problems. He submitted separately pictures of the tester, a test procedure for using the tester, a video showing the use of the tester, some reproducibility data, and a letter from the Foodservice Packaging Industry (FPI), which represents 85 % of the companies producing these types of products, indicating their industry Technical Committee supports this proposal. The submitter believes his method would be a positive addition to NIST Handbook 133 without changing any of regulatory requirements; simply improving on the technical accuracy and reproducibility of the resulting data generated.

The Standard Test Method is contained in Appendix F (*Report of the 98th National Conference on Weights and Measures* [2013]) as well as additional pictures, reproducibility data, and a blueprint of a Plate Dimension Tester.

2012 SWMA Annual Meeting: Mr. Richard Davis (Georgia Pacific) expressed concern that importers are not compliant and are causing unfair competition to U.S. manufacturers (e.g., a 1/8 inch shortage in a paper plate can equate to over \$100,000 unfair advantage). Mr. Davis has submitted this proposal that would add an additional test method but would not change the current test procedures (steel rule or graph paper) in NIST Handbook 133. Mr. Davis believes that this is a more accurate procedure than what is currently adopted and would provide support if challenged in court. The device has an estimated cost of \$3000 and would be available through a third party. A video was shown describing how to operate and test. An industry official expressed concern on whether the equipment and disc can be certified and calibrated by a state lab. The Committee believes that the device would provide an additional option and improved test procedures for regulators and industry. SWMA forwarded the item to NCWM, recommending it as a Voting Item.

2013 NEWMA Annual Meeting: The Association heard from the Ms. Hockert that the NIST Dimensional Laboratory reported no problems with the testing device. Based on this new information, NEWMA believes this item is fully developed and recommends this as a Voting Item.

2013 CWMA Annual Meeting: The Association agreed that this is an improved test method and recommends it as a Voting Item.

2013 NCWM Interim Meeting: Mr. Davis provided a presentation that showed an overview on the test standard and equipment they are proposing to use in the test procedure. Mr. Davis believes that the item presented before the Committee will allow for greater efficiency, accuracy, repeatability, and uncertainty. This device will also allow for the testing of other products such as paper towels, napkins, and sandwich bags. Ms. Carol Hockert (NIST, OWM) volunteered to take the information to the NIST Dimensional Laboratory for further accuracy testing. The Committee feels that this item is developed and is recommending this item as a Voting Item.

2013 NCWM Annual Meeting: The Committee believes that additional work is needed on this item. The procedure title may need to reflect *bowls and platters*. A separate NIST Handbook 133 procedure also needs to be created in order to utilize the Plate Dimension Tester. Some spoke that it is not feasible to place the Plate Dimension Tester in the current test procedure in NIST Handbook 133 (2013). The Item Under Consideration also has a TAPPI standard reference, and there was not a copy of this standards available for review. There was testimony heard on this item, and it was concluded that it needs further development. The Committee returned this item to Developing status to give the submitter an opportunity to further develop this item.

Additional letters, presentations, and data may have been part of the Committee's consideration. Please refer to Appendix C, *Report of the 97th National Conference on Weights and Measures* (SP 1160, 2012) and Appendix F of this report (*Report of the 98th National Conference on Weights and Measures* [2013]) to review these documents.

270-6 D Section 3.10. Animal Bedding

This appeared as Voting Item 260-2 in the *Committee Reports for the 98th Annual Meeting* (NCWM Publication 16, 2013). At the 2013 NCWM Annual Meeting the Committee Modified the status of this item to a Developing Item. This is now identified as Item 270-6.

Source:

Central Weights and Measures Association (2012)

Purpose:

This proposal is to clarify appropriate test procedures for animal bedding.

Item Under Consideration:

Amend NIST Handbook 133, Test Procedures – For Packages Labeled by Volume as follows:

3.10. ~~Mulch, and Soils, and Animal Bedding~~ Labeled by Volume

Mulch is defined as “any product or material except peat or peat moss that is advertised, offered for sale, or sold for primary use as a horticultural, above-ground dressing, for decoration, moisture control, weed control, erosion control, temperature control, or other similar purposes.”

Soil is defined as “any product or material, except peat or peat moss that is advertised or offered for sale, or sold for primary use as a horticultural growing media, soil amendment, and/or soil replacement.”

Animal bedding is defined as “any product or material, except for baled straw or peat moss, that is advertised, offered for sale, or sold for primary use as a medium for animals to bed, nest or eliminate waste, such as compressed wood pulp or cellulose fibers (confetti, granules, or pellets), softwood shavings, shredded paper, compressed coconut fiber, ground corn cob, pelleted paper or wheat straw, cotton fibers, and bamboo products or any other material.”

Animal bedding as “animal bedding of all kinds, except for baled straw”

3.10.1. Test Equipment:

- A test measure appropriate for the package size that meets the specifications for test measures in Table 3-4. “Specifications for Test Measures for Mulch, ~~and Soils~~ and **Animal Bedding**”
- Drop cloth/polyethylene sheeting for catching overflow of material
- Level (at least 15 cm [6 in] in length)

**Table 3-4.
Specifications for Test Measures for Mulch, and Soils, and Animal Bedding**

Nominal Capacity of Test Measure ⁴	Actual Volume of the Measure ⁴	Interior Wall Dimensions ¹			Marked Intervals on Interior Wall ³	Volume Equivalent of Marked Intervals
		Length	Width	Height ²		
30.2 L (1.07 cu ft) for testing packages that contain less than 28.3 L (1 cu ft or 25.7 dry qt)	31.9 L (1.13 cu ft)	213.4 mm (8.4 in)	203.2 mm (8 in)	736.6 mm (29 in)	12.7 mm (¹ / ₂ in)	550.6 mL (33.6 in ³)
28.3 L (1 cu ft)	28.3 L (1 cu ft)	304.8 mm (12 in)	304.8 mm (12 in)	304.8 mm (12 in)		1179.8 mL (72 in ³)
56.6 L (2 cu ft)	63.7 L (2.25 cu ft)	304.8 mm (12 in)	304.8 mm (12 in)	685.8 mm (27 in)		
		406.4 mm (16 in)	228.6 mm (9 in)	685.8 mm (27 in)		
84.9 L (3 cu ft)	92 L (3.25 cu ft)	304.8 mm (12 in)	304.8 mm (12 in)	990.6 mm (39 in)		
		406.4 mm (16 in)	228.6 mm (9 in)	990.6 mm (39 in)		

Measures are typically constructed of 1.27 cm (½in) marine plywood. A transparent sidewall is useful for determining the level of fill, but must be reinforced if it is not thick enough to resist distortion. If the measure has a clear front, place the level gage at the back (inside) of the measure so that the markings are read over the top of the mulch.

Notes

¹ Other interior dimensions are acceptable if the test measure approximates the configuration of the package under test and does not exceed a base configuration of the package cross-section.

²The height of the test measure may be reduced, but this will limit the volume of the package that can be tested.

³When lines are marked in boxes, they should extend to all four sides of the measure if possible to improve readability. It is recommended that a line indicating the MAV level also be marked to reduce the possibility of reading errors when the level of the mulch is at or near the MAV.

⁴The Nominal Capacity is given to identify the size of packages that can be tested in a single measurement using the dry measure with the listed dimensions. It is based on the most common package sizes of mulch in the marketplace. If the measures are built to the dimensions shown above the actual volume will be larger than the nominal volume so that plus errors (overfill) can be measured accurately.

(Amended 2010)

3.10.2. Test Procedure

1. Follow the Section 2.3.1. “Define the Inspection Lot.” Use a “Category A” sampling plan in the inspection, and select a random sample.
2. Open each package in turn. Empty the contents of the package into a test measure and level the contents by hand. Do not rock, shake, drop, rotate, or tamp the test measure. Read the horizontal marks to determine package net volume.

Note: Mulch: Some types of mulch are susceptible to clumping and compacting. Take steps to ensure that the material is loose and free flowing when placed into the test measure. Gently roll the bag before opening to reduce the clumping and compaction of material.

Compressed state animal bedding: To measure the usable volume, first empty the contents of the package on a drop cloth. Using your hands, or a tool if necessary, loosen the material until it is free of all clumps and compaction. When the product is free flowing, place in a test measure. To determine volume of the compressed state animal bedding, follow Section 3.9.1. “Compressed Volume Packages.”

3. Exercise care in leveling the surface of the mulch/soil/animal bedding and determine the volume reading from a position that minimizes errors caused by parallax.
4. Determine package errors by subtracting the labeled volume from the package net volume in the measure. Record each package error.

$$\text{Package Error} = \text{Package Net Volume} - \text{Labeled Volume}$$

3.10.3. Evaluation of Results

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

Note: In accordance with Appendix A, Table 2-10. Exceptions to the Maximum Allowable Variations for Textiles, Polyethylene Sheeting and Film, Mulch and Soil Labeled by Volume, Packaged Firewood, and Packages Labeled by Count with 50 Items or Fewer, and Specific Agricultural Seeds Labeled by Count, apply an MAV of 5 % of the declared quantity to mulch, **and** soil **and animal bedding** sold by volume. When testing mulch and soil with a net quantity in terms of volume, one package out of every 12 in the sample may exceed the 5 % MAV (e.g., one in a sample of 12 packages; two in a sample of 24 packages; four in a sample of 48 packages). However, the sample must meet the average requirement of the “Category A” Sampling Plan.

Table 2-10. Exceptions to the Maximum Allowable Variations for Textiles, Polyethylene Sheeting and Film, Mulch, and Soils, and Animal Bedding Labeled by Volume, Packaged Firewood, and Packages Labeled by Count with 50 Items or Fewer, and Specific Agricultural Seeds Labeled by Count.	
	Maximum Allowable Variations (MAVs)
Mulch, And Soil, and Animal Bedding Labeled By Volume	<p>The MAVs are:</p> <p>For individual packages: 5 % of the labeled volume.</p> <p>For example: One package may exceed the MAV for every 12 packages in the sample (e.g., when the sample size is 12 or fewer, 1 package may exceed the MAV and when the sample size is 48 packages, 4 packages may exceed the MAV).</p> <p><u>NOTE: For Animal Bedding there is a temporary exemption not to apply the MAV. After July 2017, there will be an MAV of 5 % of the labeled volume applied to “animal bedding”</u></p>

(Amended 2010 ~~and 20XX~~)

Background/Discussion:

NIST Handbook 130, Uniform Regulation for the Method of Sale, Section 2.23. Animal Bedding states:

2.23. Animal Bedding. – Packaged animal bedding of all kinds, except for baled straw, shall be sold by volume, that is, by the cubic meter, liter, or milliliter and by the cubic yard, cubic foot, or cubic inch. If the commodity is packaged in a compressed state, the quantity declaration shall include both the quantity in the compressed state and the usable quantity that can be recovered.

Example: 250 mL expands to 500 mL (500 in³ expands to 1000 in³).

(Added 1990) (Amended 2012)

However, NIST Handbook 133 does not include specific procedures for testing animal bedding volume declarations, compressed state quantity declarations, or usable quantity declarations. This proposal is to clarify appropriate test procedures for animal bedding.

2011 CWMA Interim Meeting: CWMA received this proposal and forwarded the item to NCWM recommending it as a Voting Item.

2012 NCWM Interim Meeting: The Committee made minor editorial changes to align the proposal with the format and language currently in NIST Handbook 133. The submitter had the word “uncompressed” added under the note section within “Evaluation of Results.” The Committee agreed and recommended to remove this word.

This proposal includes adopting both the mulch and soil test method and the evaluation of results for animal bedding. The method of evaluating results for mulch and soil testing includes an exception to the maximum allowable variation (MAV), the MAV is 5 %, and one package out of a 12 item sample (2 packages in a 24 item sample, 4 packages in a 48 item sample) is allowed to exceed the MAV. However, the sample must meet the average requirement of “Category A.” This MAV exception for mulch and soil was developed based on a study of mulch and soil test results. The Committee will ask industry to submit animal bedding product information and test data to determine if the MAV exception is appropriate for animal bedding.

An animal bedding industry representative was supportive of the 5 % allowance and also recommended a 12 × 12 × 12 cu ft vessel. The submitter of the proposal has been using the mulch test procedure to test animal

bedding and has not had issues using the procedure under the item for consideration. The 2012 L&R Committee designated this item as an Informational Item.

2012 NEWMA Annual Meeting: There were no comments. NEWMA recommended that the item remain as an Informational Item.

2012 CWMA Annual Meeting: Ms. Judy Cardin (Wisconsin) reported that there is no standard for animal bedding. Subsequently industry is using a variety of test methods that produce varying results. Wisconsin tested and found a wide variance in net quantity accuracy and found significant shortages in several instances. She encouraged other jurisdictions to test animal bedding and to share data with NIST, OWM. Missouri did a lot of testing at one facility and found a maximum of 36 % shortage and an average of 23 % shortage. Missouri's analysis further showed that the chipper had a great impact of the "spring effect" of compression. An industry representative recommended developing a method of sale for this commodity when sold from bulk since a significant amount of horse bedding is purchased in bulk. CWMA recommended that the item remain as an Informational Item.

2012 NCWM Annual Meeting: The L&R Committee requested that regulators and industry conduct animal bedding package testing, and submit their test results to Ms. Cardin at judy.cardin@wi.gov or to Mr. David Sefcik (NIST, OWM) at dsefcik@nist.gov. Preliminary analysis by NIST of available test data indicates that an exception for MAV is necessary for this product, but the Committee needs additional test data to determine the appropriate amount for that exception.

2012 CWMA Interim Meeting: There is no package testing standard in NIST Handbook 133 for animal bedding, and industry is currently using a variety of test methods that are resulting in significant non-compliance on package weights. Ms. Cardin announced that she is coordinating an animal bedding package testing survey to provide data to determine the appropriate exception to MAV for animal bedding. She asked CWMA states to participate in the October to November 2012 testing. A few states agreed to participate. CWMA recognized many states may not be able to participate given limited resources. The CWMA supported this item and recommended that the item be a Voting Item based on an appropriate MAV as determined by the study or, if the data is insufficient, using the established MAV for mulch, a similar product.

2012 WWMA Annual Meeting: Mr. Kurt Floren (Los Angeles County, California) remarked that this item is noteworthy but questioned whether it recognizes all types of animal bedding in the marketplace (e.g., ground corn cobs and shredded paper). Ms. Macey commented in support, but she would like to see additional data collected. The NIST Technical Advisor requested that states submit data on animal bedding inspections to NIST. The Committee agreed that more studies and data are needed and recommended that the results be submitted to the NCWM. The Committee believed that a better definition is needed to address various animal bedding products. WWMA recommended that the item be an Informational Item.

2012 SWMA Annual Meeting: A NIST Technical Advisor commented that the chair of the NCWM L&R is requesting states to participate in the package testing of animal bedding over the next two months in order to provide more data to help determine the appropriate MAV. SWMA recommended that the item be an Informational Item unless there is strong evidence from the survey for an appropriate MAV; in which case, SWMA would recommend it as a Voting Item.

2012 NEWMA Annual Meeting: NEWMA would like to see results of the CWMA study before action is taken on the proposal. NEWMA recommended that the item be an Informational Item.

2013 NCWM Interim Meeting: Mr. David Sefcik provided a summary of the data that was received from states and manufacturers that tested animal bedding. The findings were limited participation and very few lots passed; therefore, NIST could not make a recommendation for a MAV. Data shows there is a bigger concern than determining correct MAV. Even with applying a 5 % MAV, almost all the lots would have failed. There were also significant variations in labeled content, variability on bedding materials, different types of packing machines, and volumetric test measures. It was agreed the test procedure for mulch could be used for animal bedding. The recommendation made was the Committee should consider a temporary exemption from the MAV (three to five years). This would provide an exemption from the current MAV which is too restrictive while giving the

Committee and NIST additional time for data to be collected to determine the proper MAV. NIST will work with stakeholders to develop a standardized test measure.

Mr. Jim Byers (San Diego County, California) expressed concern that animal bedding needs to be clearly defined. Mr. Byers submitted recommended language to define animal bedding as follows:

Section 3.10. Mulch, and Soils, and Animal Bedding Labeled by Volume

“Any product or material, except for baled straw, that is advertised, offered for sale, or sold for primary use as a medium for animals to bed, nest or eliminate waste, such as compressed wood pulp or cellulose fibers (confetti, granules, or pellets), softwood shavings, shredded paper, compressed coconut fiber, ground corn cob, pelleted paper or wheat straw, cotton fibers, and bamboo products or any other material.”

Mr. Floren agrees with Mr. Byers and Mr. Sefcik on their recommendations. Mr. Rich Whiting (American Wood Fibers) spoke that they participated and their lots did not pass. American Wood Fibers would like to see a test measure and quantity control practices developed by NCWM.

The Committee agrees with the definition for animal bedding drafted by Mr. Byers with the addition of peat moss as an exemption. It was agreed to remove the MAV requirement for animal bedding, and the Committee is recommending that the states test animal bedding on the “average requirement.” The removal of the MAV for animal bedding would be a temporary exemption for a four-year period; after which time, the MAV would default to the 5 %. There was no objection from NIST on the test procedure. Information will need to be obtained from industry to determine an accurate test measure. It was also agreed to put a sunset date of July 2017 into the language. With these changes, the Committee proposes this as a Voting item.

2013 NEWMA Annual Meeting: The NIST Technical Advisor remarked that they continue to collect data on this subject matter. The Committee believes that there is sufficient data to support this item and recommends it as a Voting Item.

2013 CWMA Annual Meeting: The NIST Technical Advisor remarked that the date in the MAV table was open ended and consideration should be given to make it date specific. NIST continues to analyze testing data. States should continue to send test data to NIST. The Committee recommends that a date for the temporary exemption read July 1, 2017, and moves this forward as a Voting Item.

2013 NCWM Annual Meeting: A regulator opposed the item as written due to animal bedding being defined within a test procedure for mulch and soil. He questions how the 5 % MAV was calculated. He also does not recommend a fix of applying a temporary MAV exemption. The Committee concurs that this item is not ready to move forward as a Voting Item and moved this item to Developing so the submitter can further develop. The definition needs to be reviewed to determine any exemptions that may apply for items currently sold by weight. Reconsideration should also be given to whether a three-year exemption to the MAV is appropriate. The Committee believes this item needs to be further developed and returned to the submitter.

Ms. Judy Cardin, Wisconsin, Committee Chair

Mr. Raymond Johnson, New Mexico (Acting Chair at the 2013 NCWM Annual)

Mr. Tim Lloyd, Montana

Mr. Richard Lewis, Georgia

Mr. Louis Sakin, Towns of Hopkinton/Northbridge, Massachusetts

Mr. Rob Underwood, Petroleum Marketers Association of America | Associate Membership Representative

Mr. Lance Robertson, Measurement Canada | Canadian Technical Advisor

Mr. David Sefcik, NIST, OWM | NIST Technical Advisor

Ms. Lisa Warfield, NIST, OWM | NIST Technical Advisor

Laws and Regulations Committee

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