Report of the

Laws and Regulations Committee

Joe Benavides, Chairman

Austin, Texas

Reference

Key Number

###### 200 INTRODUCTION

This is the report of the Laws and Regulations Committee (hereinafter referred to as the “Committee”) for the 95th Annual Meeting of the National Conference on Weights and Measures (NCWM). It 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 addendum sheets issued at the Annual Meeting, and actions taken by the membership at the voting session of the Annual Meeting. The Informational items presented below were adopted as presented when this report was approved.

Table A identifies the agenda items in the Report 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 Items marked “**W**” have been Withdrawn from consideration.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 lists the appendices to the report, Table C provides a summary of the results of the voting on the Committee’s items and the report in entirety, and Table D provides a list of acronyms used in this report.

This report contains recommendations to amend National Institute of Standards and Technology (NIST) Handbook 130, 2010 Edition, “Uniform Laws and Regulations,” or NIST Handbook 133, “Checking the Net Contents of Packaged Goods,” Fourth Edition (January 2005). 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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Uniform Laws 220 Series

Weights and Measures Law (WML) 221 Series

Weighmaster Law (WL) 222 Series

Engine Fuels and Automotive Lubricants Inspection Law (EFL) 223 Series

Uniform Regulations 230 Series

Packaging and Labeling Regulation (PLR) 231 Series

Method of Sale Regulation (MSR) 232 Series

Unit Pricing Regulation (UPR) 233 Series

Voluntary Registration Regulation (VRR) 234 Series

Open Dating Regulation (ODR) 235 Series

Uniform National Type Evaluation Regulation (UNTER) 236 Series

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[B Hydrogen Fuel Method of Sale B1](file:///C:\Documents%20and%20Settings\crown\Local%20Settings\AppData\Local\Microsoft\Documents%20and%20Settings\lisawar\Local%20Settings\10-Annual%20Report\00-Template%20File\L&R\10-lr-app-b-hydro-10-pub16-final.doc)

C Packaged [Printer Ink and Toner Cartridges C1](file:///C:\Documents%20and%20Settings\crown\Local%20Settings\AppData\Local\Microsoft\Documents%20and%20Settings\lisawar\Local%20Settings\10-Annual%20Report\00-Template%20File\L&R\10-lr-app-c-ink-10-pub16-final.doc)

[D Animal Bedding D1](file:///C:\Documents%20and%20Settings\crown\Local%20Settings\AppData\Local\Microsoft\Documents%20and%20Settings\lisawar\Local%20Settings\10-Annual%20Report\00-Template%20File\L&R\10-lr-app-d-animal-10-pub16-final.doc)

[E Handbook 130 Engine Fuels and Automotive Lubricants Regulation, Section 3.15. Biodiesel and Biodiesel Blends E1](file:///C:\Documents%20and%20Settings\crown\Local%20Settings\AppData\Local\Microsoft\Documents%20and%20Settings\lisawar\Local%20Settings\10-Annual%20Report\00-Template%20File\L&R\10-lr-app-e-biodiesel-10-pub16-final.doc)

[F Table of Proposed Amendments and Editorial Changes for Handbook 133, *Checking the Net Contents of Packaged Goods,* Fourth Edition F1](file:///C:\Documents%20and%20Settings\crown\Local%20Settings\AppData\Local\Microsoft\Documents%20and%20Settings\lisawar\Local%20Settings\10-Annual%20Report\00-Template%20File\L&R\10-lr-app-f-h133chart-10-pub16-final.doc)

[G Draft of Handbook 133, *Checking the Net Contents of Packaged Goods,* Fourth Edition with Proposed Amendments and Editorial Changes G](file:///C:\Documents%20and%20Settings\crown\Local%20Settings\AppData\Local\Microsoft\Documents%20and%20Settings\lisawar\Local%20Settings\10-Annual%20Report\00-Template%20File\L&R\10-lr-app-g-h133-10-pub16-final.doc)1

[H Agriculture Seed Count Rule H1](file:///C:\Documents%20and%20Settings\crown\Local%20Settings\AppData\Local\Microsoft\Documents%20and%20Settings\lisawar\Local%20Settings\10-Annual%20Report\00-Template%20File\L&R\10-lr-app-h-seedct-10-pub16-final.doc)

[I Polyethylene Sheeting I1](file:///C:\Documents%20and%20Settings\crown\Local%20Settings\AppData\Local\Microsoft\Documents%20and%20Settings\lisawar\Local%20Settings\10-Annual%20Report\00-Template%20File\L&R\10-lr-app-i-plastic-10-pub16-final.doc)

[J Amerigrow Mulch Proposal and Documentation J1](file:///C:\Documents%20and%20Settings\crown\Local%20Settings\AppData\Local\Microsoft\Documents%20and%20Settings\lisawar\Local%20Settings\10-Annual%20Report\00-Template%20File\L&R\10-lr-app-j-mulch-10-pub16-final.doc)

[K National Pasta Association (NPA) Proposal to Establish a Moisture Allowance for Pasta Products) K1](file:///C:\Documents%20and%20Settings\crown\Local%20Settings\AppData\Local\Microsoft\Documents%20and%20Settings\lisawar\Local%20Settings\10-Annual%20Report\00-Template%20File\L&R\10-lr-app-k-pasta-10-pub16-final.doc)

**Table C**

**Voting Results**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Reference Key Number*** | | ***House of State Representatives*** | | | ***House of Delegates*** | | ***Results*** | |
| ***Yeas*** | | ***Nays*** | ***Yeas*** | ***Nays*** |
| 232-1 | | 34 | 0 | 46 | 0 | | Passed |
| 232-2 | | 34 | 0 | 47 | 0 | | Passed |
| 232-3 | | 31 | 0 | 42 | 0 | | Passed |
| 232-6 | | 32 | 2 | 37 | 3 | | Passed |
| 260-1 | | 28 | 5 | 44 | 2 | | Passed |
| 260-2 | | 30 | 4 | 39 | 3 | | Passed |
| 260-6 | | 21 | 10 | 25 | 11 | | Returned to Committee |

**Table D**

**Glossary of Acronyms and Terms**

|  |  |  |  |
| --- | --- | --- | --- |
| **Acronym** | **Term** | **Acronym** | **Term** |
| AASCO | Association of American Seed Control Officials | IICA | International Ice Cream Association |
| AOSA | Association of Official Seed Analyst | L&R | Laws and Regulations |
| ASTA | American Seed Trade Association | NCWM | National Conference on Weights & Measures |
| ASTM | American Society for Testing and Materials International | NIST | National Institute of Standards & Technology |
| CFR | Code of Federal Regulations | MLWG | Moisture Loss Work Group |
| CNG | Compressed Natural Gas | NEWMA | Northeastern Weights & Measures Association |
| CWMA | Central Weights & Measures Assn. | NFPA | National Fire Protection Association |
| FALS | Fuels and Lubricants Subcommittee | NTEP | National Type Evaluation Program |
| FDA | Food and Drug Administration | S&T | Specifications & Tolerances Committee |
| FD&C Act | Food Drug and Cosmetic Act | SI | International System of Units |
| FPLA | Fair Packaging and Labeling Act | SWMA | Southern Weights & Measures Association |
| FSIS | Food Safety and Inspection Service | UPLR | Uniform Packaging and Labeling Regulation |
| FSS | Fuel Specifications Subcommittee | USDA | U.S. Department of Agriculture |
| FTC | Federal Trade Commission | USNWG | U.S. National Work Group |
| HB 44 | NIST Handbook 44, *Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices* | WG | Work Group |
| HB 130 | NIST Handbook 130, *Uniform Laws and Regulations in the areas of Legal Metrology and Engine Fuel Quality* | WMD | NIST Weights & Measures Division |
| HB 133 | NIST Handbook 133, *Checking the Net Content of Packaged Goods* | WWMA | Western Weights & Measures Association |
| IDFA | International Dairy Food Association |  |  |

#### Details of all Items

#### (In order by Reference Key Number)

###### 231 Packaging and labeling Regulation (PLR)

**231-1 D HB 130, Packaging and Labeling Requirements, Section 6, Declaration of Quantity: Consumer Products (refer to Item 270-14 in the NCWM 2010 L&R Committee Interim Agenda)**

**Source:** Northeastern Weights and Measures Association (NEWMA)

**Purpose:** To allow manufacturers to develop multi-lingual labels. This item would permit manufacturers to use approved symbols on consumer packages.

**Item Under Consideration:** AmendHB 130 Packaging and Labeling Regulations, Section 6: Declaration of Quantity: Consumer Packages, addition to 6.4.1. Combination Declaration:

**Numerical Count**

**Numerical count can be expressed as either:**

1. alpha-numeric characters **(Figure A);** or
2. alpha-numeric characters in conjunction with an approved symbol of the commodity from Section 6.7.1 (Figure B).

|  |  |  |
| --- | --- | --- |
| **3 Razors**  (Figure A.) |  | (Figure B) |

HB 130 Packaging and Labeling Regulations, Section 6: Declaration of Quantity: Consumer Packages amend Section 6.7.1., Symbols and Abbreviations (Figure C).

|  |
| --- |
| **Disposable Razor**  (figure C) |

**Background/Discussion:** A representative of Procter and Gamble (P&G) submitted a proposal at the 2009 NEWMA Interim Meeting held in Springfield, Massachusetts. This proposal is to amend the language in HB 130 Packaging and Labeling Regulation, Section 6 that will facilitate value comparisons for a diverse set of consumers. It is proposed to amend the net content declaration of content for consumer products labeled only with a count to allow for the use of approved symbols. According to P&G, this will limit the language of net content information, especially products with multi-language declarations, making the statement more noticeable to the eye. In addition, labels that are intended towards consumers whose first language is not English will benefit from knowing the content visually versus by text. P&G states that by ensuring the net content information is more noticeable; consumers will be more likely to make value comparisons.

P&G cites 21CFR 201.15 (c)(2); this requirement formally applies to over the counter drug products, but absent guidance for other categories of products subject to the Food Drug and Cosmetic Act (FD&C Act) and Food Packaging and Labeling Act (FPLA). This provides the best guidance principles for manufacturers to develop compliant multilingual labels. P&G states that net content translation and package size considerations can make a compliant statement difficult to understand.

Language extracted from 21 CFR 201.15:

(c)(1) All words, statements, and other information required by or under authority of the act to appear on the label or labeling shall appear thereon in the English language: *Provided, however,* that in the case of articles distributed solely in the Commonwealth of Puerto Rico or in a Territory where the predominant language is one other than English, the predominant language may be substituted for English.

(2) If the label contains any representation in a foreign language, all words, statements, and other information required by or under authority of the act to appear on the label shall appear thereon in the foreign language.

(3) If the labeling contains any representation in a foreign language, all words, statements, and other information required by or under authority of the act to appear on the label or labeling shall appear on the labeling in the foreign language.

At the 2009 NEWMA Interim Meeting held October 12 - 15, 2009, Springfield, Massachusetts, the L&R Committee recommended this proposal be a Developing item.

At the 2010 NCWM Interim Meeting held in Nashville, Tennessee, Mr. Chris Guay, P&G, provided an explanation that in Europe products sold by count are using pictograms in the net content declaration and the package could be considered multi-language. This system would allow for industry to develop one package that can be used in several different countries without having to develop packaging for one specific language. An official urged that this be a Developing item to see if pictograms could be acceptable.

The Committee would like to see this item go through all the regions (NEWMA, CWMA, WWMA, and SWMA) for review and comment. The Committee requested from Mr. Guay an approved set of international pictograms and further information on the labeling requirements (FPLA). The NIST Technical Advisor will also research the pictograms for any conflicts with other Federal Laws and Regulations. The NIST Technical Advisor met with the Federal Trade Commission (FTC) on February 26, 2010, to seek their assistance in reviewing this proposal. The L&R Committee agreed that this should be a Developing item.

At the 2010 NEWMA Annual Meeting held in Groton, Connecticut, in May 2010, there were no comments heard on this item. The Committee agreed that this item should remain as a Developing item until further information is made available. The NIST Technical Advisor has not heard back from FTC regarding this issue

At the 2010 CWMA Annual Meeting held in Springfield, Illinois, in May 2010, an industry representative mentioned that there are several issues with this proposal: the Federal Drug Administration (FDA) will need to update labeling regulations, changing demographics, and international marketing of products requiring information in several languages. Regulations need to be put in place to either prohibit this practice or to establish guidelines and regulations. An inspector commented that the use of pictographs is currently in the marketplace, and it is considered a violation in their jurisdiction.

At the NCWM Annual Meeting held in St. Paul, Minnesota, on July 12 - 15, 2010, no comments were received on this item.

###### 232 METHOD OF SALE REGULATION

**232-1 V Method of Sale for Fireplace and Stove Wood, Flavoring Chips, and Packaged Natural Wood** (refer to Item 232-3 in the NCWM 2010 L&R Committee Interim Agenda)

(This item was adopted.)

**Source:** Southern Weights and Measures Association (SWMA) (2008 Carryover Item)

**Purpose:** The purpose of this proposal is to clarify the requirement for the display of metric units. The current regulation lacks a clearly stated requirement for the appropriate unit use of metric measure by volume for fireplace and stove wood, flavoring chips, and packaged natural wood. When a quantity statement for cubic meter is carried out to three decimal points, it is likely not useful in making value comparisons.

In Method of Sale Regulation, HB 130, Section 2.4.3.(d) states that flavoring chips shall be sold by volume, but it falls short of saying which volume units are required. Packers refer to Section 2.4.3. Quantity, where the guidance seems to imply that chips must be sold by the cubic meter. This creates a conflict between the Method of Sale of Commodities Regulation and the Uniform Packaging and Labeling Regulation (UPLR) Declaration of Quantity for Consumer Packages Rule of 1000. Using cubic centimeters would also create a conflict.

**Item Under Consideration:** Amend Section 2.4.3. as follows:

**2.4.3. Quantity.** – Fireplace and stove wood shall be advertised, offered for sale, and sold only by measure, using the term “cord” and fractional parts of a cord or the cubic meter, except that:

1. **Packaged natural wood.** – Natural wood offered for sale in packaged form in quantities less than 0.45 m3 (1/8 cord or 16 ft3) shall display the quantity in terms of:
2. **~~cubic meters~~** **liters**, to include **~~decimal~~** fractions of **~~cubic meters~~** liters; or
3. for quantities less than one cubic foot, in terms of cubic inches; or
4. for quantities of one cubic foot or greater, in terms of cubic feet, to include fractions of a cubic **~~feet~~** foot.
5. **Artificial compressed or processed logs.** – A single fireplace log shall be sold by weight, and packages of such individual logs shall be sold by weight plus count.
6. **Stove wood pellets or chips.** – Pellets or chips not greater than 15 cm (6 in) in any dimension shall be sold by weight. This requirement does not apply to flavoring chips.

(Amended 1976 and 1991)

1. **Flavoring chips.** – **~~Flavoring~~ ~~chips shall be sold by volume.~~** Flavoring chips offered for sale in packaged form in quantities less than 0.45 m3 (**1/8** cord or 16 ft3) shall display the quantity in terms of:
2. **~~cubic meters~~** **liters**, to include **~~decimal~~** fractions of **~~cubic meters~~** liters; or
3. for quantities less than one cubic foot, in terms of cubic inches; or
4. for quantities of one cubic foot or greater, in terms of cubic feet, to include fractions of a cubic **~~feet~~** foot.

(Added 1998) (Amended 2010)

**Note: In determining the appropriate Method of Sale, a clear distinction must be made as to whether the wood is being sold primarily as fuel (some wood is sold as fuel, but flavoring is a byproduct) or strictly as a wood flavoring.**

**(Added 2010)**

**Background/Discussion:** A state cited a company for a violation of the jurisdictions net quantity contents labeling for flavoring chips. The citation also led this to initiate a review of all of its packaging and labeling to ensure compliance with HB 130 regulations. The company requested assistance from Weights and Measures Division (WMD) on the appropriate unit of metric measure for their flavoring chip packaging. Upon review, it became apparent that the regulation was ambiguous about the appropriate metric volume unit to be used. When a quantity statement for cubic meter is carried out to three decimal points, it is likely not useful in making value comparisons.

In HB 130, Method of Sale Regulation, Section 2.4.3.(d) states that flavoring chips shall be sold by volume, but it falls short of saying which volume units are required. Most packers also refer to Section 2.4.3. Quantity, which contains the Commodities Regulation and UPLR - Declaration of Quantity for Consumer Packages Rule of 1000. Using cubic centimeters also causes a conflict. Most states, if not all, give precedent to UPLR over the Method of Sale because most jurisdictions adopt the UPLR and not the Method of Sale of Commodities Regulation.

Proposal initially submitted in 2008.

**2.4.3. Quantity.** – Fireplace and stove wood – Shall be advertised, offered for sale, and sold only by measure, using the term “cord” and fractional parts of a cord or the cubic meter, except that:

1. **Packaged natural wood.** – Natural wood offered for sale in packaged form in quantities less than 0.45 m3 (1/8 cord or 16 ft3) shall display the quantity in terms of **~~cubic meters~~****liters**, to include **~~decimal~~** fractions of **~~cubic meters~~** liters; or cubic feet or cubic inches up to one cubic foot, to include fractions of a cubic **~~feet~~** foot.

**(Amended 20XX)**

1. **Artificial compressed or processed logs.** – A single fireplace log shall be sold by weight, and packages of such individual logs shall be sold by weight plus count.
2. **Stove wood pellets or chips.** – Pellets or chips not greater than 15 cm (6 in) in any dimension shall be sold by weight. This requirement does not apply to flavoring chips.

(Amended 1976 and 1991)

1. **Flavoring chips.** – **~~Flavoring chips shall be sold by volume.~~** Flavoring chips offered for sale in packaged form in quantities less than 0.45 m3 (**1/8** cord or 16 ft3) shall display the quantity in terms of liters, to include fractions of liters, cubic feet, or cubic inches up to one cubic foot, to include fractions of a cubic foot.

(Added 1998) **(Amended 20XX)**

**Note: In determining the appropriate Method of Sale, a clear distinction must be made as to whether the wood is being sold primarily as fuel (some wood is sold as fuel, but flavoring is a byproduct) or strictly as a wood flavoring.**

**(Added 20XX)**

This item was presented at the NCWM 2008 Annual Meeting and at all of the 2008 Regional Meetings.

At the 2009 Interim Meeting, it was requested to add the words “up to one cubic foot” after the words cubic inches. The Committee agreed to modify the proposal and move it forward for a vote at the 2009 Annual Meeting.

At the 2009 Central Weights and Measures Association (CWMA) Annual Meeting in St. Louis, Missouri, on May 3 - 6, 2009, a NIST Technical Advisor recommended that the proposal be changed in Section 2.4.3.(a) to read as … fractions of liters **~~cubic meters~~.** A state regulator stated that the proposal conflicts with HB 44 “Units of Measures” and believes that liters should only be used for fluid measurements. After review of HB 44, Appendix C. (pgs. C‑2 and C‑8), the CWMA L&R Committee did not feel that there is a conflict. The CWMA L&R Committee supports this item for the following reasons: “A precedent has been established for use of liters in dry measure (e.g., mulch), traditional industry practices utilize liters as their method of sale, it provides a better value comparison, and it would remove the current conflict with violation of the Rule of 1000 when cubic meters are used.”

At the 2009 NEWMA Annual Meeting in South Portland, Maine, May 11 - 14, 2009, the NEWMA L&R Committee supported this item along with the recommended changes from the NIST Technical Advisor. A NIST Technical Advisor recommended that the proposal be changed in Section 2.4.3.(a) to read as: fractions of liters **~~cubic meters~~.** A state official stated that the changes to this section are being made to correct a technical error with the use of metric measure and that customary units will not change. An industry representative questioned whether liters would be the correct metric measure and suggested decimeters. It was noted that decimeters and liters are equivalent.

At the 2009 NCWM Annual Meeting in San Antonio, Texas, there was discussion that this proposal needs additional review by the NCWM L&R Committee for editorial changes. The original proposal did not adequately correct the issue and for that reason it was not adopted at the 2009 NCWM Annual Meeting and was returned to the NCWM L&R Committee for further consideration. It was recommended that the term “fraction of liters and cubic feet” be given consideration.

At the 2009 CWMA Interim Meeting in Rock Island, Illinois, the participants supported the proposal in the recommendation shown above. The CWMA recommended to the NCWM Committee that the proposal under consideration go forward as a Voting item.

At the 2009 Western Weights and Measures Association (WWMA) Annual Meeting in Los Cruces, New Mexico, the WWMA L&R Committee heard specific recommendations for changes to the current proposal during its open hearings.

The WWMA L&R Committee supports the need for clarification and this could be accomplished by changing the following wording to replace the current recommendation with:

**2.4.3.**  **Quantity.** – Fireplace and stove wood shall be advertised, offered for sale, and sold only by measure, using the term “cord” and fractional parts of a cord or the cubic meter, except that:

1. **Packaged natural wood.** – Natural wood offered for sale in packaged form in quantities less than 0.45 m3 (1/8 cord or 16 ft3) shall display the quantity in terms of:
2. **~~cubic meters~~** **liters**, to include **~~decimal~~** fractions of **~~cubic meters~~** liters; or
3. for quantities less than one cubic foot, in terms of cubic inches; or
4. for quantities of one cubic foot or greater, in terms of cubic feet, to include fractions of a cubic **~~feet~~** foot.
5. **Artificial compressed or processed logs.** – A single fireplace log shall be sold by weight, and packages of such individual logs shall be sold by weight plus count.
6. **Stove wood pellets or chips.** – Pellets or chips not greater than 15 cm (6 in) in any dimension shall be sold by weight. This requirement does not apply to flavoring chips.

(Amended 1976 and 1991)

1. **Flavoring chips.** – **~~Flavoring~~ ~~chips shall be sold by volume.~~** Flavoring chips offered for sale in packaged form in quantities less than 0.45 m3 (**1/8** cord or 16 ft3) shall display the quantity in terms of:
2. **~~cubic meters~~** **liters**, to include **~~decimal~~** fractions of **~~cubic meters~~** liters; or
3. for quantities less than one cubic foot, in terms of cubic inches; or
4. for quantities of one cubic foot or greater, in terms of cubic feet, to include fractions of a cubic **~~feet~~** foot.

(Added 1998) (Amended 201X)

At the 2009 SWMA Annual Meeting in Clearwater, Florida, the SWMA L&R Committee received a comment from an industry representative that there are two legal units of measurement, but only one unit of measurement is being proposed in this item. An industry representative expressed that additional work needs to be done on this item. The SWMA recommends to the NCWM L&R Committee that this item go forward as a Voting item.

At the 2009 NEWMA Interim Meeting held in Springfield, Massachusetts, they received positive comments on this proposal. NEWMA also reviewed the WWMA 2009 changes and supports this item with the Western recommendations.

At the 2010 the NCWM Interim Meeting held in Nashville, Tennessee, the Committee agreed to move forward the WWMA recommendation. There were no comments heard on this item during the open hearings. The Committee agreed to move the item under consideration forward as a Voting item.

At the 2010 NEWMA and the CWMA Annual Meetings no comments were received on this item and both Committees recommended that this item move forward as a Voting item.

At the 2010 NCWM Annual Meeting held in St. Paul, Minnesota, a comment was received from a California county director that the item for consideration clears up confusion with the metric statement and he supports it, as it appears.

232-2 V Pelletized Ice Cream (refer to Item 270-3 in the NCWM 2010 L&R Committee Interim Agenda)

(This item was adopted.)

**Source:** NIST Weights and Measures Division, International Dairy Foods Association (IDFA), FDA

**Purpose:** Pelletized ice cream is manufactured using very low temperatures and a liquid nitrogen process in order to form the unique beads. FDA declared that pelletized ice cream is a semi-solid food, in accordance with 21 CFR 101.105(a), the appropriate net quantity of content declaration for this type of product is net weight. An FDA Official attending the 2009 NCWM Annual Meeting stated that manufacturers have until April 2010 to modify their labels with a net weight declaration. The purpose of this proposal is to amend the current method of sale requirements, which require ice cream to be sold by volume to reflect that the FDA now requires pelletized ice cream to be sold by weight.

**Item Under Consideration:** Insert the following language into HB 130, Method of Sale Regulation:

1.7.2. Pelletized Ice Cream - A semi-solid food product manufactured at very low temperatures using a nitrogen process and consisting of small beads of varying sizes.  Bits of inclusions (cookies, candy, etc.) that also vary in size and weight may be mixed with the pellets.

1.7.2.1.  Method of Retail Sale -  Packaged pelletized ice cream shall be kept, offered, or exposed forsale on the basis of net weight.

(Note:  This method of sale shall be enforceable after April 17, 2010)

**Background/Discussion:** At the 2008 NCWM Annual Meeting open hearings, Ms. Cary Frye, Vice President, Regulatory and Scientific Affairs from the International Ice Cream Association (IICA), gave a briefing on behalf of industry on pelletized ice cream. This product briefing covered the standard of identity, test method procedures, and several other key points. Ms. Frye informed the Conference that additional assistance would be required from the FDA (refer to the Table B, Appendix D in the 93rd NCWM Conference Report).

The WMD submitted to the NCWM L&R Committee detailed minutes pertaining to the June 27, 2008, meeting held at NIST, concerning issues with the pelletized ice cream product. The minutes (see Table B, Appendix E refer to Item 237‑2 in the report of the 94th Interim Meeting in 2009) provide great detail of the current issue, background information, representatives and manufacturers, method of sale, and test method procedure.

This item has been presented at the 2008 WWMA and the SWMA Annual Meetings and at NEWMA and the CWMA Interim Meetings. NEWMA discussed this issue, including the FDA’s role and their impact on the NCWM process. One member stated that the FDA may be slow to reach a decision because of an impending change in leadership. Another member expressed the difficulty (practical experience) of testing this product. All regions are in agreement that this item should remain Developmental until further information is received from the FDA.

At the 2009 NCWM Interim Meeting, it was reported by a NIST Technical Advisor that the FDA was actively working on this item.

At the 2009 NCWM Annual Meeting in San Antonio, Texas, the NIST Technical Advisor presented a letter dated April 17, 2009, (see the NCWM 2010 Interim L&R Appendix D) from the FDA regarding their decision on the method of sale for pelletized ice cream. The FDA declared that pelletized ice cream is a semi-solid food, in accordance with 21 CFR 101.105(a), and the appropriate net quantity of content declaration for this type of product is net weight. A FDA Official attending the NCWM Annual Meeting stated that manufacturers have until April 2010 to modify their labels with a net weight declaration. Manufacturers that are unable to meet this deadline will need to contact the FDA. The FDA will look at each extension request on a case-by-case basis. The FDA replied to the IDFA/IICA in a letter dated October 22, 2009, denying their request to change the label compliance date to January 2, 2012 (refer to L&R Appendix E in the NCWM 2010 Interim Agenda). The FDA will continue to review any request for an extension on a case-by-case basis.

At the CWMA 2009 Interim, the WWMA 2009 Annual, the SWMA 2009 Annual, and NEWMA 2009 Interim Meetings, there were no comments heard, and all regions recommended to the Committee that the proposed item move forward as a Voting item.

At the 2010 NCWM Interim Meeting open hearings, Ms. Frye informed attendees that she is requesting clarification from the FDA regarding the classification for pelletized “ice” products and frozen desserts to also be exempted.

The Committee recommends the item be moved forward as a Voting item at the Annual Meeting to be held in St. Paul, Minnesota, in July 2010. Any additional information submitted by the FDA on Ms. Frye’s issue will be taken into consideration at the meeting.

At the NEWMA Annual Meeting held in Groton, Connecticut, in May 2010, there was concern expressed from a State Director that changing the sales and testing procedure of ice cream could conflict with existing state regulations.

At the CWMA Annual Meeting held in Springfield, Illinois, in May 2010, the Committee recommends this as a Voting item, to provide a method of sale for pelletized ice cream only.

At the 2010 NCWM Annual Meeting in St. Paul, Minnesota, Minnesota, Ms. Frye informed the Conference that on May 14, 2010, a written request was submitted to the FDA, to include similar pelletized products (ice, water ice, sherbet, or other frozen dessert). Ms. Frye informed the Conference that manufacturers are currently revising their labels to be compliant with the new regulation. One manufacturer, Kemps, has received a one year extension from the FDA on getting their labels in compliance (refer to Appendix A). The NIST Technical Advisor advised the Conference that a copy of the waiver letter extending the compliance date would be distributed to the NCWM members and State Directors.

232-3 V Method of Sale for Hydrogen (refer to Item 270-4 in the NCWM 2010 L&R Committee Interim Agenda)

(This item was adopted.)

**Source:** Western Weights and Measures Association (WWMA)

**Purpose:** Adopt a method of sale for hydrogen in HB 130 to address gaseous hydrogen refueling applications. There is a corresponding proposal in Section 360 Other Items of the January 2010 NCWM Interim S&T Agenda to add a tentative Hydrogen Gas Measuring Devices Code to HB 44 to address requirements for hydrogen gas refueling equipment.

**Item Under Consideration:** The U.S. National Work Group (USNWG) Fuel Specifications Subcommittee (FSS) presented the following recommendation for consideration for inclusion in HB 130 Uniform Regulations for Method of Sale of Commodities. (Item has been renumber to fit the requirements of HB 130.)

**2.32. Retail Sales – Hydrogen Fuel (H).**

**2.32.1. Definitions Hydrogen Fuel (H). – A fuel composed of the chemical hydrogen intended for consumption in an internal combustion engine or fuel cell.**

**2.32.2. Method of Retail Sale and Dispenser Labeling. – All hydrogen fuel kept, offered, or exposed for sale and sold at retail shall be in mass units in terms of the kilogram.**

**The symbol for hydrogen vehicle fuel shall be the capital letter “H” (the word Hydrogen may also be used).**

**2.32.3. Retail Dispenser Labeling.**

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

**2.32.4. Street Sign Prices and Advertisements.**

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

(Added 2010)

**Background/Discussion:** Twenty-four states have hydrogen refueling dispensers in operation. Hydrogen stations using permanent and mobile refueling systems for automobiles, fleet vehicles (buses), forklifts, and airport totes are increasing and may go unnoticed. Many stakeholders who are not familiar with the weights and measures standards process will need to participate at this stage rather than after this is a commercial application. This effort by the USNWG for the Development of Commercial Hydrogen Measurement Standards is to ensure there are appropriate standards and test procedures in place in time for dispenser manufacturers, service agencies, and officials to educate the general public, not if, but for when retail hydrogen applications become commercially available.

Existing codes do not fully address hydrogen refueling applications because of hydrogen’s properties and other technical differences in the setup and operations of dispensing systems. The development of legal metrology standards for newly emerging hydrogen technology is a necessary component of the hydrogen infrastructure. The weights and measures community must have time to consider requirements for hydrogen-refueling systems before this application is available for public access at corner service stations.

The USNWG is bringing the proposal before the weights and measures community to share this information about upcoming standards for an emerging technology. The simultaneous development of the code and corresponding test procedures will allow for input from the weights and measures and hydrogen communities, appropriate trials of the standards, and to address all areas of concerns early in the standards development process.

This item was reviewed at the WWMA and the SWMA 2008 Annual Meetings and at the NEWMA 2008 Interim Meeting. NEWMA members generally discussed the hydrogen issue and its usage in the marketplace. It is anticipated that hydrogen at first will be relegated to fleet vehicles (such as compressed natural gas [CNG]), and that retail sales will be slow in coming to the marketplace. NEWMA recommends that this item remain a Developing item.

At the 2009 Interim and Annual Meetings, the NIST Technical Advisor briefed the Committee on work that the USNWG FSS has done to date (refer to the report of the 94th Annual NCWM Conference, Appendix J for Hydrogen USNWG FSS background information). In April 2009 at the U.S. National Hydrogen Work Group (WG) meeting held in Sacramento, California, the WG further clarified the definition for street sign prices to specify that the megapascal is the appropriate SI unit for expressing the numerical value of the dispenser’s service pressure on street signs.

There were no comments received on this proposal at the CWMA 2009 Interim Meeting.

At the WWMA 2009 Annual Meeting held in Los Cruces, New Mexico, industry representatives acknowledged that some details of the specifications for fuel standards are in development. The WWMA Committee believes it is best to be proactive on this item so that Hydrogen stations can be ready to make retail sales.

At the SWMA 2009 Annual Meeting held in Clearwater, Florida, the SWMA L&R Committee received a recommendation from a state that as the test methods are developed they get published. The state also requested that documentation be produced on the affects of hydrogen if they exceed certain property values listed in the table “Hydrogen Fuel Quality Specification,” and why this is important in the testing of hydrogen.

At the NEWMA 2009 Interim Meeting held in Springfield, Massachusetts, the Committee reviewed this proposal and recommended it be a Developing item.

During the open hearings at the 2010 Interim Meeting held in Nashville, Tennessee, a California state official spoke in support of this item to move forward as a Voting item so that there is a method of sale for the commercialization of hydrogen. The Committee agreed that the method of sale go forward as a Voting item. The Committee indicated that the test methods were not developed enough to move the fuel quality specification portion forward. The Hydrogen Fuel Quality Specification section will remain as Informational (refer to Item 237-2 in the report of the 95th NCWM Annual Meeting).

At the 2010 NEWMA Annual Meeting held in Groton, Connecticut, they supported this proposal and recommended it move forward as a Voting item.

At the 2010 CWMA Annual Meeting held in Springfield, Illinois, there were no comments heard. The Committee recommends moving this forward as a Voting item, but does not specifically indicate support for this proposal.

At the 2010 Annual Meeting held in St. Paul, Minnesota, several states expressed support for adoption. The Committee also received five letters reflecting support of this item (refer to Appendix B in the report of the 95th NCWM Annual Meeting). The NIST Technical Advisor advised the conference that there is a corresponding Item 237-2 (refer to the report of the 95th NCWM Annual Meeting) that refers to the engine fuel quality requirements for hydrogen which is an Informational item on the L&R agenda.

Additional information on this hydrogen item and the corresponding hydrogen gas measuring devices code can be found at [www.nist.gov/pml/wmd/lmdg/hydrogen.cfm](http://www.nist.gov/pml/wmd/lmdg/hydrogen.cfm). For additional information on this item, contact Ms. Lisa Warfield at lisa.warfield@nist.gov or (301) 975‑3308.

232-4 I Method of Sale Regulation Section 2.13.4. “Declaration of Weight” (refer to Item 270-6 in the NCWM 2010 L&R Committee Interim Agenda)

**Source:** Western Weights and Measures Association (WWMA)

**Purpose:** Update HB 130, Section 2.13.4. to provide new density values for heavier density plastics that are currently in the marketplace.

**Item under Consideration:** Amend HB 130, Method of Sale Regulation, Section 2.13.4. as follows:

**2.13.4. Declaration of Weight.** – The labeled statement of weight for polyethylene sheeting and film products under Sections 2.13.1.1. Sheeting and film, and 2.13.3.1. Bags, shall be equal to or greater than the weight calculated by using the formula below. The final value shall be calculated to four digits, and declared to three digits, dropping the final digit as calculated (for example, if the calculated value is 2.078 lb, then the declared net weight shall be 2.07 lb).

For SI dimensions:

M = T x A x D/1000, where:

M = net mass in kilograms

T = nominal thickness in centimeters

A = nominal length in centimeters times nominal width [***NOTE 6***, page 122] in centimeters

D = density in grams per cubic centimeter as determined by ASTM Standard D1505 68, Standard Method of Test for Density of Plastics by the Density Gradient Technique (or latest issue)

For the purpose of this regulation, when D is not known, the minimum density (D) used to calculate the target net weight for linear low polyethylene products (LLPD) and products other than high density (HDPE) shall be 0.92 g/cm3 **~~(when D is not known).~~**

**For products labeled High Density (HDPE) or similar wording, the minimum density (D) used to calculate the target net weight shall be 0.95 g/cm³.**

For inch-pound dimensions:

W = T x A x 0.03613 x D, where:

W = net weight in pounds;

T = nominal thickness in inches;

A = nominal length in inches times nominal width [***NOTE 6***, page 122] in inches;

D =  density in grams per cubic centimeter as determined by ASTM Standard D1505 68, Standard Method of Test for Density of Plastics by the Density Gradient Technique (or latest issue); and 0.03613 is a factor for converting g/cm3 to lb/in3.

**~~For the purpose of this regulation, the minimum density shall be 0.92 g/cm~~~~3~~~~.~~**

(Added 1977) (Amended 1980, 1982, 1987, 1989, 1990, 1993, and 201X)

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

**Background/Discussion:** It was stated at the 2009 WWMA Annual Meeting in Los Cruces, New Mexico, some manufacturers and distributors of polyethylene bags are using the calculated target weight identified in HB 130 Section 2.13.4. to understate the net quantity of their labels. The polyethylene industry recognizes a density value of 0.92 g/cm³ for linear low polyethylene products (LLDP). When 0.92 g/cm³ is used to calculate the target net weight of high-density polyethylene (HDPE), the product may make the target net weight. However, when the appropriate density value of 0.95 g/cm³ is used to test HDPE, the product often fails to meet the calculated target net weight. Further testing reveals than one or more of the labeled width, thickness, or count statements are inaccurate. It appears that some manufacturers are aware that weights and measures officials are restricted to testing HDPE product using the 0.92 g/cm³ value because the actual density value is not stated on the product label. Existing procedural guidelines do not address high density polyethylene materials. When testing at manufacturing locations, weights and measures officials are able to obtain information regarding the density of the product directly from the manufacturer. However, at distributor locations density information is not available and officials must test using the 0.92 g/cm³ value designated in HB 130 and HB 133 to verify the weight of the product. When the product has no net weight statement on the package, 0.92 g/cm³ is the only factor that the inspector may use to calculate the target net weight.

The 2009 WWMA Association supports the following item and recommends that it be a Voting item:

* + 1. **Declaration of Weight.** – The labeled statement …

**~~For the purpose of this regulation, the minimum density shall be 0.92 g/cm³ (when D is not known).~~**

**~~For the purpose of this regulation, the minimum density shall be 0.92 g/cm³.~~**

Amend Section 2.13.4. as follows:

For the purpose of this regulation, when D is not known, the minimum density(D) used to calculate the target net weigh for linear low polyethylene produ cts (LLDP) and products other than high density (HDPE)shall be 0.92 g/cm³ **~~(when D is not known)~~.** For products labeled “High Density,” HDPE, or similar wording, the minimum density (D) used to calculate the target net weight shall be 0.95 g/cm³.

NEWMA reviewed this item at its 2009 Interim Meeting and recommends that this proposal be a Developing item.

At the 2010 NCWM Interim Meeting held in Nashville, Tennessee, the Committee heard support for the density factor changing from 0.92 g/cm³ to 0.95 g/cm³ on this item. A California county commissioner indicated that the information provided by the WWMA was data extracted from Internet searches. Manufacturers are complaining that under current practice they cannot compete fairly.

Mr. Mike Jackelen from Berry Plastics urged the Committee to reject this proposal. Mr. Jackelenstated that 0.92g/cm³ density currently works for manufacturers and that changing it to 0.95 g/cm³ will cause undue cost and waste. Most manufacturers do not make high density (HD) bags, but are producing blends. According to Mr. Jackelen, another reason to reject the proposal is if the 0.95 g/cm³ bag is punctured, it continues to tear.

A state official commented that if you use the term HD, then you are bound by the 0.95 g/cm³. If you use the length x width x thickness to determine the net weight, then the density value needs to be added on the package labeling. A state official said that manufacturers should consider disclosing the density factor on every product as part of the labeling. It was voiced that if there are questions about an absolute 0.95 g/cm³ density, then there should be an alternative.

Another state official commented that the 0.95 g/cm³ will be factored in only when the density is not known. The Committee received letters that were reviewed on this item. The Committee recommended moving the item under consideration forward as a Voting item.

At the 2010 NEWMA Annual Meeting in Groton, Connecticut, the region was concern that there appears to be a lack of data on this item. This item was never reviewed by all regions and not presented to industry for comments. The Committee felt this item was not an emergency and would like to review comments received from all the regions and industry.

At the 2010 CWMA Annual Meeting in Springfield, Illinois, the Committee heard no comments on this item and recommended moving it forward as a Voting item.

At the 2010 NCWM National Meeting in St. Paul, Minnesota, the Committee heard from Mr. Jackelen (refer to Appendix I within the report of the 95th NCWM Annual Meeting [2010]) who opposed this item and requested that it be withdrawn.  Mr. Jackelen believes this proposal would have a detrimental effect because can liners are made of natural gas and oil, and the cost of these two items are increasing. Currently, the 0.92 g/cm³ is an established practice in industry and the marketplace and is used to set the bottom weight. Changing this density will cause confusion. Mr. Jackelen clarified that High Density (HD) does not mean it is a better density.  There are other linear bags that have higher quality than HD. As far as sustainability, if 0.95 g/cm³ is the established requirement it will cause an additional 12 million pounds of trash to be generated.

An official countered that the intent of this proposal is to provide the inspectors with information. There is fraud in the marketplace on these types of items and additional information is warranted. A director recommends that a minor amendment be done to the item under consideration and insert “for products labeled HD when the D is not on the package label use 0.95 g/cm³.” Also use a similar statement “if the packer or manufacturer does not disclose the density then use 0.95 g/cm³.” The director pointed out that it is not the role of the conference to address quality issues, but to have a level playing field for inspectors to test a product. Another official remarked that companies need to identify their product on the container, and inspectors will use what density is disclosed.

The Committee received one letter asking for the withdrawal of this proposal and California submitted material safety data sheets from several companies (refer to Appendix H within the report of the 95th NCWM Annual Meeting [2010]). The Committee considered comments received and agreed that more work was needed so the item was changed to Informational status.

232-5 I Uniform Regulation for Method of Sale of Commodities - Packaged Printer Ink and Toner Cartridges (refer to Item 270-9 in the NCWM 2010 L&R Committee Interim Agenda)

**Source:** Southern Weights and Measures Association (SWMA)

**Purpose:** This proposal is to clarify the labeling requirements for industry, consumers and weights and measures officials.

**Item Under Consideration:**

2.XX. Printer Ink and Toner Cartridges.

2.XX.1 Definitions.

**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 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.**

**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 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.

**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 of such cartridges and the fluid volume of ink in each cartridge stated in terms of milliliters or fluid ounces.**

**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 of such cartridges and the net weight of toner**

**substance.**

(Added 201X)

**Background/Discussion:** Over the past several years, there has been a change in the marketplace on inkjet and toner cartridges net content statements. Currently, there is little uniformity in the marketplace on this item, and the Committee is seeing some labels with a net content or with only a page yield count (e.g., prints 1000 pages). The WMD pointed out that according to guidelines printed in HB 130 from the 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.

At the 2009 SWMA Annual Meeting in Clearwater, Florida, 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. Max Gray, Director of Florida 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 503.2(a).

An industry representative believes 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 felt that more data is needed from manufacturers on this issue.

The SWMA L&R Committee recommends the item be considered for Developing by the NCWM L&R Committee.

At the 2010 Interim Meeting held in Nashville, Tennessee, the Committee heard testimony from Mr. Matthew Barkley, Hewlett Packard, regarding how 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. Page yield is widely accepted and has repeatability measures. Mr. Barkely urged that this issue be withdrawn. If this issue is to proceed, it should be Informational and a review of the FPLA exemption needs to be reviewed.

Mr. Paul Jeran, Hewlett Packard, submitted a white paper (refer to Appendix C in the report of the 95th NCWM Interim Meeting) from the Information Technology Industry Council (ITI). 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 currently working on a photo yield standard.

A state official expressed concerns with page yield being the standard page print for quantity. There are variations in yield based on the type of cartridge, printer, 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 what the refillers are listing on cartridge labels for the amount of ink. With the quality of manufactured packages in the marketplace, value comparison to original equipment manufacturer (OEM) is critical. Ink/toner is an expensive commodity and clarifications of the requirements are needed. A state official recommended that this item not be withdrawn, but made Informational to allow for additional research. It is firmly believed that there is a need for consistency with the declaration statement on these types of items. A consumer stated his belief that net content needs to be stated with voluntary supplemental information for page yield. Others voiced the 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 (refer to Appendix C for background information in the report of the 95th NCWM Annual Meeting [2010]). NIST 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 Committee recommends that this item be made Informational until they can receive clarification from the FTC, review ISO standards, and determine what refillers’ current practices are.

At the 2010 NEWMA and the CWMA Annual Meetings the Committees received a presentation from Mr. Stephen Pociask from American Consumer Institute, regarding a lack of consumer information when purchasing computer printers and cartridges. Both Committees expressed that there are still many unanswered questions and would like to hear from manufacturers of ink and toner cartridges. NEWMA and the CWMA recommend that this be an Informational item.

At the 2010 Annual Meeting held in St. Paul, Minnesota, Mr. Pociask presented a study done by his organization (refer to Appendix C within the report of the 95th NCWM Annual Meeting [2010]). It was asked who initially requested the study and who funded it. Mr. Pociask stated that the study was done in 2007 with funding by a telemarketing research company.

A Weights and Measures Official expressed concern that the study presented was not clear; is cartridge page count based on certain fill levels or declaring the weight on the cartridge itself? Mr. Pociask responded that currently Quality Logic uses the ISO standards. He also concluded that net weight is easy to enforce. Mr. Pociask stressed that his focus is to provide consumers with useful information to use in purchasing printers, and the life cost of the printer, which includes 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 ink cartridge refillers need to be addressed.

Mr. Joshua Rosenberg, IT Industry Council (ITI), 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 expressed that there is a lot more that needs to be discussed on this issue (refer to Appendix C within the report of the 95th NCWM Annual Meeting [2010]).

At the 2010 Annual Meeting, the Board of Directors established a Printer Ink and Toner Cartridge Work Group to review and obtain additional information from all stakeholders. Ms. Vicky L. Dempsey, Chief Inspector, Montgomery County, Ohio will Chair this group and Lisa Warfield will be the NIST Technical Advisor. If you are interested in participating in this work group, please contact Ms. Dempsey at telephone (937) 225-6309 or e-mail: DempseyV@mcohio.org.

232-6 V Method of Sale, Section 2.23. Animal Bedding (refer to Item 270-12 in the NCWM 2010 L&R Committee Interim Agenda)

(This item was adopted.)

**Source:** Southern Weights and Measures Association (SWMA)

**Purpose:** To amend NIST HB 130, Method of Sale, Section 2.23. Animal Bedding and the Interpretations and Guidelines Section 2.3.16. to accommodate the special needs and provisions of granular, pelleted, and other non-compressible, dry laboratory animal bedding materials sold to commercial end-users in the specialized lab animal research industry on a weight or per pound basis.

**Item Under Consideration:** Amend HB 130, Method of Sale, to include an exemption for non-consumer packages sold to laboratory animal research industry.

**Section 2.23**.

**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)

2.23.1. Exemption – Non Consumer Packages Sold to Laboratory Animal Research Industry. –Packaged animal bedding consisting of granular corncobs and other dry (8 % or less moisture), pelleted, and/or non-compressible bedding materials that are sold to commercial (non-retail) end users in the laboratory animal research industry (government, medical, university, preclinical, pharmaceutical, research, biotech, and research institutions) **~~shall~~** may be sold on the basis of weight.

**(Added 201X)**

Delete the following section from HB 130, Interpretations and Guidelines:

**~~Section 2.3.16. Animal Bedding~~**

**~~(L&R, 1988, p. 159)~~**

**~~Recommended Method of Sale~~**

**~~Animal bedding of all kinds, except for baled straw, should be sold by volume, that is, by the cubic meter, cubic yard, cubic foot or cubic inch.~~**

**~~The test method in Handbook 133, Section 4.11. Peat Moss, can be used for animal bedding. The test official should “fluff up” or in some way reduce the amount of compaction of product that may occur under ordinary packaging and distribution processes prior to testing.~~**

**Background/Discussion:** At the 2009 SWMA Annual Meeting in Clearwater, Florida, Mr. Terry Burns-Heffner, Harlan Laboratories, gave a briefing on “Bedding Packaging for Research Applications.” He recommended that HB 130 be modified primarily to better control and regulate retail materials, such as mulch, peat moss, and top soil that were being sold by weight, but could easily be “spiked” with moisture. During the revision of this guideline, animal bedding materials were also rolled into this category.

Section 2.23. Paragraph 1, Sentence 1 as follows:

**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)

**2.23.1. Packaged animal bedding consisting of granular corncobs and other dry (less than 8 % moisture or less), pelleted, and/or non-compressible bedding materials that are sold to commercial (non-retail) end users in the laboratory animal research industry (government agencies, medical centers and universities, pharmaceutical and pre-clinical contract research organizations and other biotech and related research institutions) can still be sold on the basis of weight.**

**(Added 201X)**

**HB 130, Interpretations and Guidelines:** Remove this section.

~~2.3.16. Animal Bedding~~

**~~(L&R, 1988, p. 159)~~**

**~~Recommended Method of Sale~~**

**~~Animal bedding of all kinds, except for baled straw, should be sold by volume, that is, by the cubic meter, cubic yard, cubic foot or cubic inch.~~**

**~~The test method in Handbook 133, Section 4.11. Peat Moss, can be used for animal bedding. The test official should “fluff up” or in some way reduce the amount of compaction of product that may occur under ordinary packaging and distribution processes prior to testing.~~**

For dry, non-compressible bedding substrates, such as granular corn cobs and pelleted paper, wood, and corn cobs that are sold to commercial end users in the laboratory animal research industry, this generalized classification and change from selling by weight to selling by volume is inappropriate for numerous reasons:

1. Requiring the sale of dry, granular or non-compressible pelleted bedding materials on the basis of volume provides an incentive for the manufacturer to produce lighter, less dense bedding, and, therefore, that bedding has less absorptive capacity. Therefore, selling bedding by volume is not in the consumers’ best interest, because it is the amount of absorbent material in a cage that is most important, not the volume.
2. Historically, consumers in this non-retail industry segment, including government and regulatory agencies, such as the National Institute of Health (NIH), the Department of Defense DOD, and pharmaceutical and university research sites have purchased bedding material on the basis of weight.
3. There are existing governing bid specifications on all lab animal bedding material that tightly controls the nature and consistency of the bedding materials sold for this specific purpose. These specifications include restrictions on maximum moisture concentration, which generally require all bedding materials to contain less than 10 % moisture. Typical moisture range for these materials is in the 6 % to 8 % range. This has become the industry standard.
4. Verification of package contents is very easy to do, if it is packaged by weight. Verification of proper package content becomes difficult when product is packaged by volume, and, once again, there is the opportunity/incentive for the manufacturer to reduce amounts of bedding material put into packages over time. This verification is even more difficult on larger, bulk packages, such as the large bulk totes ranging in weight from 500 lb to 2000 lb.

At the 2010 NCWM Interim Meeting held in Nashville, Tennessee, the Committee received written notification (refer Appendix D) from industry reflecting their support on this item. During the open hearings, there were several representatives from industry who spoke on behalf of this. This item currently represents the current method of sale practice in the marketplace and, in addition, they are requesting an 8 % or less moisture loss. The 8 % moisture allowance originates from the NIH. A California official stated that if weight is important, then both weight and volume should be declared. The Government requires animal bedding to be sold on a weight basis. The NIST Technical Advisor will provide language to capture both methods of sale for the exemption. The Committee recommends the item under consideration be moved forward as a Voting item.

At the 2010 NEWMA and the CWMA Annual Meetings, there were no comments received on this item, and both regions recommend this remain a Voting item.

At the 2010 NCWM Annual Meeting in St. Paul, Minnesota, the Committee received several letters on this item (refer to Appendix D in the report of the 95th NCWM Annual Meeting [2010]). There were many letters opposing this item for the following reasons: historically this is how animal bedding is being sold in the retail and laboratory marketplace, product is not consistent in density, and measurement is not appropriate for all bedding.

A presentation was given by Mr. Jerry Reynolds, The Andersons, who opposes this item. Mr. Reynolds’ presentation pointed out that one item, corn cob, should not be singled out as an exception. The current regulation recognizes that a consistent bag fill is the proper measurement and method of sale to ensure consumer protection. When utilizing this product, in cage fills they are done by volume not by weight. In 1967, The Andersons was one of the first companies to sell cob bedding, which was then sold by weight. In 2006, the regulation was changed for bedding to be sold by volume because this was considered a consistent measure. Mr. Reynolds is in agreement with the moisture standard of 8 % or less.

A presentation in favor of the proposal was done by Mr. Burns-Heffner, Harlan Laboratories. Mr. Burns-Heffner stated that corn cob bedding is not sold in retail outlets, and all bedding materials are not created equal. It varies in material and characteristics. Mr. Burns-Heffner stated bedding materials are purchased and shipped, and the selling price is determined using weight. Selling by weight is precise, controlled, and easily verifiable and is the preferred method of sale with most clients in industry. Also, similar materials, such as wood pellets, stone, and gravel are sold by weight.

Mr. Reynolds did verify with Mr. Burns-Heffner of Harlan Laboratories that they are not a manufacturer of corn cob bedding. They are a packer of this type of product.

An official asked Mr. Burns-Heffner, “What percentage of customers is requesting to buy bedding by weight?” Mr. Burns-Heffner stated government agencies, and large pharmaceutical companies request this method.

Mr. Michael Schoonover, Shepherd Specialty Papers, informed the conference that they agree with Harlan Laboratories that bedding covers a wide range of products and some bedding should not fall be sold by volume. This type of product is sold to a limited marketplace.

Mr. Gregg Sharp, Green Products Company, is in favor of this proposal, which will allow non-consumer groups to buy by either method.

Two states recommended that the current method remain as is, and with consideration given to the possibility of a supplementary declaration on this product.

The Committee agreed that the language in the stated exemption is only for non-consumer packages sold to the animal research industry. Currently, it is the practice to sell by weight to research institutes and federal agencies. Updating the method of sale will allow manufacturers to follow an official method of sale.

###### 237 ENGINE FUELS AND AUTOMOTIVE LUBRICANTS REGULATION (EFT)

237-1 W Uniform Engine Fuels Regulation – Section 2.2.1 Premium Diesel Lubricity (refer to Item 270-1 in the NCWM 2010 L&R Committee Interim Agenda)

(This item was withdrawn.)

**Source:** Southern Weights and Measures Association (SWMA) (See Item 270‑5 in the Report of the 92nd Annual NCWM Meeting in 2006)

**Purpose:** Effective January 1, 2005, the test tolerance for regular diesel lubricity was ASTM D6079 reproducibility of 136 μm (see ASTM D975‑04b). The NCWM chose to accept the ASTM reproducibility limits for all diesel (D975) and gasoline (D4814) properties (see HB 130, Section 7.2.2. Reproducibility), but chose a different reproducibility limit for premium diesel lubricity without providing any explanation as to why the ASTM reproducibility limit was insufficient. The Chairman of the Fuels and Lubricants Subcommittee (FALS) provided an update at the 2010 Interim Meeting on the work being done at ASTM.

**Item Under Consideration:** Amend HB 130, Uniform Engine Fuels and Automotive Lubricants Regulation. Section 2.2.1., Premium Diesel Fuel. The following reflects the current text as it was modified in 2003.

**2.2. Diesel Fuel.** – shall meet the most recent version of ASTM D975, “Standard Specification for Diesel Fuel Oils.”

**2.2.1. Premium Diesel Fuel.** – All diesel fuels identified on retail dispensers, bills of lading, invoices, shipping papers, or other documentation with terms such as premium, super, supreme, plus, or premier must conform to the following requirements:

(a) **Cetane Number.** – A minimum cetane number of 47.0 as determined by ASTM Standard Test Method D613.

(b) **Low Temperature Operability.** – A cold flow performance measurement which meets the ASTM D975 tenth percentile minimum ambient air temperature charts and maps by either ASTM Standard Test Method D2500 (Cloud Point) or ASTM Standard Test Method D4539 (Low Temperature Flow Test, LTFT). Low temperature operability is only applicable October 1 ‑ March 31 of each year.

(c) **Thermal Stability.** – A minimum reflectance measurement of 80 % as determined by ASTM Standard Test Method D6468 (180 min, 150 °C).

(d) **Lubricity.** – A maximum wear scar diameter of 520 µm as determined by ASTM D6079. If an enforcement jurisdiction’s single test of more than 560 µm is determined, a second test shall be conducted. If the average of the two tests is more than 560 µm, the sample does not conform to the requirements of this part.

(Amended 2003)

Background/ Discussion: (Refer to the NCWM 93rd Annual Meeting (2008) for background information on this item.) A member of the petroleum industry believed the test and associated tolerances for lubricity on premium diesel specified in Section 2.2.1.(d) Lubricity were inconsistent with that for regular diesel. Effective January 1, 2005, the test tolerance for regular diesel lubricity was the ASTM D6079 reproducibility of 136 μm (see ASTM D975‑04b). The NCWM chose to accept the ASTM reproducibility limits for all diesel (D975) and gasoline (D4814) properties (see Section 7.2.2. Reproducibility), but chose a different reproducibility limit for premium diesel lubricity without providing any explanation as to why the ASTM reproducibility limit was insufficient. If the NCWM intended to impose a stricter lubricity requirement for premium diesel, it should have designated a tighter specification for this property, not a different test tolerance (e.g., for regular and premium gasoline, premium has a different octane specification than for regular, but the test tolerance is the same). ASTM reproducibility limits were, by definition, based on establishing a 95 % probability that product that should pass, will pass. Applying an average test, as specified in Section 2.2.1.(d), reduced that probability to 80 %.

At the 2006 WWMA Annual Meeting, the L&R Committee received only one comment regarding this item, acknowledging the ongoing review by the FALS. The WWMA noted that the NCWM L&R Committee forwarded the proposal for review by the Subcommittee and agreed this item should remain Developmental pending its recommendation.

At its 2006 CWMA Interim Meeting, the Committee indicated the NCWM Fuel and Lubricant Subcommittee would make recommendations after ASTM improved the test method’s precision and after the conclusion of other tests. The CWMA L&R Committee is awaiting the recommendation from the Subcommittee.

During the 2007 NCWM Interim Meeting, the Committee carried this item over as an Information item. The Committee sent this proposal to FALS and requested its recommendation on how to proceed with the issue. The FALS suggested this item remain on the agenda as an Information item until further notice and reported that the activities of ASTM International and the Coordinating Research Council were continuing.

At the 2008 NCWM Interim Meeting in Albuquerque, New Mexico, and the 2008 NCWM Annual Meeting in Burlington, Vermont, the Committee carried this item over as a Developing item. This proposal was sent to FALS for its recommendation on how to proceed with the issue. FALS suggested this item continue to remain on the agenda as a Developmental item.

At the 2008 CWMA Interim Meeting, the Committee requested that this item remain Informational pending release of the FALS recommendation, the Coordinating Research Council study, and the ASTM Lubricity Test Method Task Force reports. At the 2008 NEWMA, the WWMA, and the SWMA Annual Meetings, the Committees recommended that this item remain Informational.

In October 2008, NEWMA held their Interim Meeting, where they heard from a representative of the bio-diesel industry who briefed members on the newly adopted FTC standards regarding bio-diesel products, including the labeling of B‑5, B‑20, and B‑100. One member expressed a concern regarding the “field testing” of bio-fuel blends and quality. This member also expressed that not enough testing occurs with regard to “octane quality” and that bio-blend testing would probably be conducted even less.

At the 2009 NCWM Interim Meeting in Daytona Beach, Florida, FALS reported to the Committee that they are awaiting development of items from ASTM.

At the 2009 CWMA Annual Meeting, the Committee recommended that this item remain Informational. The Chairman of the FALS provided an update on the work being done at ASTM. ASTM conducted a round robin to develop better precision for measuring lubricity. There is a Coordinating Research Council study to determine whether the wear scar limit is adequate to provide protection.

At the 2009 NEWMA Annual Meeting, the Committee recommended that this item remain Informational.

At the 2009 Annual Meeting held in San Antonio, Texas, the FALS Chairman gave an update that ASTM is still working on improving the precision of the test method. This should go to ballot at ASTM this semester and be final in December. The Committee recommends that this item remain informational until ASTM adopts a revision to its standard.

At the 2009 CWMA Interim Meeting held in Rock Island, Illinois, the FALS Chairman, Mr. Ron Hayes, provided CWMA an update on the ASTM ballot to revise the precision of the test method as a result of the recent round robin study. The ballot failed in June at the main committee and the new proposal is being developed for ballot.

At the 2009 WWMA Annual Meeting in Los Cruces, New Mexico, the SWMA Annual Meeting in Clearwater, Florida, and the NEWMA Interim Meeting held in Springfield, Massachusetts, there were no comments heard and these regions recommended that this proposal remain a Developing item.

At the 2010 Interim Meeting, the FALS Chairman provided an update that the ASTM ballot items failed in June 2009. They are working on improving the test method and this continues to be an on-going process.

At the 2010 NEWMA Meeting in Groton, Connecticut, the Committee heard no comments on this item. The Committee recommends that this remain an Informational item.

At the 2010 CWMA Annual Meeting in Springfield, Illinois, a state regulator recommended that this item be withdrawn. A state regulator commented that the precision of the test method still does not provide adequate protection when the precision is acknowledged for enforcement purposes for premium diesel fuel.

At the 2010 NCWM Annual Meeting in St. Paul, Minnesota, it was recommended by Mr. Randy Jennings, Tennessee, that the Committee consider withdrawing this item because it has been under consideration since 2006, and little progress has been made. The FALS Chairman supported withdrawing this item. The Committee changed the status of this item to Withdrawn during this meeting.

For additional information, please contact Mr. Hayes, FALS Chairman, (573) 751‑2922 or [ron.hayes@mda.mo.gov](mailto:ron.hayes@mda.mo.gov) by e‑mail.

237-2 I Engine Fuel Quality Requirements for Hydrogen (refer to Item 270-4 in the NCWM 2010 L&R Committee Interim Agenda)

**Source:** Western Weights and Measures Association (WWMA)

**Purpose:** Adopt engine fuel quality requirements for hydrogen in HB 130 to address gaseous hydrogen refueling applications. There is a corresponding proposal in Section 360 Other Items of the January 2010 NCWM Interim S&T Agenda to add a Draft Hydrogen Gas Measuring Devices Code to HB 44 to address requirements for hydrogen gas refueling equipment

**Item Under Consideration:** The U.S. National Work Group (USNWG) Fuel Specifications Subcommittee (FSS) presented the following recommendation for consideration.

FSS supports the proposed new definitions to address gaseous hydrogen refueling applications.

1. Specification for Hydrogen Fuel for Internal Combustion Engines and Fuel Cells

2. Definitions

1.XX. Fuel Cell. – an electrochemical energy conversion device **~~used to convert hydrogen and oxygen into electrical~~** in which fuel and an oxidant react to generate energy without consumption of its electrodes or electrolytes **~~to power a motor vehicle~~**.

(Added 201X)

**1.XX. Hydrogen Fuel. – a fuel composed of the chemical hydrogen intended for consumption in a surface vehicle with an internal combustion engine or fuel cell.**

(Added 201X)

1.XX. Internal Combustion Engine. – a device used to **~~ignite hydrogen in a confined space to create mechanical~~** generate power by converting chemical energy bound in the fuel into mechanical work to power a **~~motor~~** vehicle.

(Added 201X)

**Specification for Hydrogen Fuel:**

The FSS identified several quality criteria where there was tentative agreement with their associated values (see properties 6, 7, 8, 9, 12, 14, and 16 which are highlighted in green) in the proposed Table 1. Hydrogen Fuel Quality Specification. When a quality property and numerical value (defining a maximum or minimum limit) is added to the specification, appropriate test methods must then be identified. As test methods are identified and adopted by the FSS, they will be added to column 6 (test methods) in Table 1. The FSS did not agree on all of the properties contained in the DMS proposal because there was either not enough research data or test methods available to support a decision (see properties 1, 2, 3, 4, 5, 10, 11, 13, and 15 which are highlighted in yellow) in Table 1 below. These and perhaps other properties will receive further consideration by the FSS and may be added to the quality standard in the future when such action is supported by research.

In April 2009, at the U.S. National Hydrogen Work Group meeting held in Sacramento, California, they further refined the definitions for hydrogen vehicle fuel based on input from SAE International. The definitions were modified to include more technically correct language and the text is in alignment with the widely recognized “Bosch Automotive Handbook.” In January 2010, a column was added to Table 1. Hydrogen Fuel Quality Specifications to reflect the responsible standards committee and the status of the test method.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Table 1. Hydrogen Fuel Quality Specification\*** | | | | | | |
| **Property** | | **Value** | **Unit** | **Limit** | **Test Method(s)** | **Responsible Stds. Committee and**  **Status of test method** |
| 1 | Ammonia | 0.1 | ppm v/v | Maximum | to be specified | WK 10196 under ASTM D03.14 |
| 2 | Carbon Dioxide | 2.0 | ppm v/v | Maximum | to be specified | WK 10196 and WK 4548 under ASTM D03.14 |
| 3 | Carbon Monoxide | 0.2 | ppm v/v | Maximum | to be specified | WK 10196 under ASTM D03.14 |
| 4 | Formaldehyde | 0.01 | ppm v/v | Maximum | to be specified | WK 10196 under ASTM D03.14 |
| 5 | Formic Acid | 0.2 | ppm v/v | Maximum | ASTM D7550-09 | WK 10196 under ASTM D03.14 |
| 6 | Helium | 300.0 | ppm v/v | Maximum | to be specified | ASTM D03.14 |
| 7 | Hydrogen Fuel Index | 99.97 | % (a) | Minimum | to be specified |  |
| 8 | Nitrogen and Argon | 100.0 | ppm v/v | Maximum | to be specified | WK 4548 under ASTM D03.14 |
| 9 | Oxygen | 5.0 | ppm v/v | Maximum | to be specified | WK 4548 under ASTM D03.14 |
| 10 | Particulate Concentration | 1.0 | mg/kg | Maximum | to be specified | WK 9688 and WK 21611 under ASTM D03.14 |
| 11 | Total Allowable Non-Hydrogen, Non-Helium,  Non-Particulate constituents | 100.0 | ppm v/v | Maximum | to be specified |  |
| 12 | Total Non-Hydrogen Gases | 300.0 | ppm v/v (b) | Maximum | to be specified |  |
| 13 | Total Halogenated Compounds | 0.05 | ppm v/v | Maximum | to be specified | WK 23815 under ASTM D03.14 |
| 14 | Total Hydrocarbons | 2.0 | ppm v/v (c) | Maximum | to be specified | WK 22378 under ASTM D03.14 |
| 15 | Total Sulfur Compounds | 0.004 | ppm v/v | Maximum | to be specified | WK 24073 under ASTM D03.14 |
| 16 | Water | 5.0 | ppm v/v | Maximum | to be specified | WK 10196 and WK 4548 under ASTM D03.14 |
| Footnotes to Table 1 –  a. Hydrogen fuel index is the value obtained with the value of total gases (%) subtracted from 100 %.  b. Total Gases = Sum of all impurities listed on the table except particulates.  c. Total Hydrocarbons may exceed 2 ppm v/v only due to the presence of methane, provided that the total gases do not exceed 300 ppm v/v. | | | | | | |
| \* The FTC’s Fuel Rating Rule (16 CFR Part 309) see the requirements in “Labeling of Alternative Fuels” at <http://www.ftc.gov/bcp/edu/pubs/business/autos/bus29.shtm> requires dispensers to bear an declaration of minimum percent of hydrogen determined according to test methods described in “Standard Test Method for Analysis of Natural Gas by Gas Chromatography (ASTM D1946) | | | | | | |
| Updated 1/20/2010 | | | | | | |

**Background/Discussion:** Twenty-four states have hydrogen refueling dispensers in operation. Hydrogen stations using permanent and mobile refueling systems for automobiles, fleet vehicles (buses), forklifts, and airport totes are increasing and may go unnoticed. Many stakeholders who are not familiar with the weights and measures standards process will need to participate at this stage rather than after this is a commercial application. This effort by the USNWG for the Development of Commercial Hydrogen Measurement Standards is to ensure there are appropriate standards and test procedures in place in time for dispenser manufacturers, service agencies, and officials to educate the general public, not if, but when retail hydrogen applications become commercially available.

Existing codes do not fully address hydrogen refueling applications because of hydrogen’s properties and other technical differences in the setup and operations of dispensing systems. The development of legal metrology standards for newly emerging hydrogen technology is a necessary component of the hydrogen infrastructure. The weights and measures community must have time to consider requirements for hydrogen-refueling systems before this application is available for public access at corner service stations.

The USNWG is bringing the proposal before the weights and measures community to share this information about upcoming standards for an emerging technology. The simultaneous development of the code and corresponding test procedures will allow for input from the weights and measures and hydrogen communities, appropriate trials of the standards, and to address all areas of concerns early in the standards development process.

This item was reviewed at the WWMA and SWMA 2008 Annual Meeting and at the NEWMA 2008 Interim Meeting. NEWMA members generally discussed the “hydrogen issue” and its usage in the marketplace. It is anticipated that hydrogen at first will be relegated to “fleet vehicles” (such as compressed natural gas [CNG]), and that retail sales will be slow in coming to the marketplace. NEWMA recommends that this item remain a Developing item.

At the 2009 Interim and Annual Meetings, the NIST Technical Advisor briefed the Committee on work that the USNWG FSS has done to date (refer to Appendix J in the report of the 94th Annual NCWM Conference [2009]).

There were no comments heard on this proposal at the CWMA 2009 Interim Meeting.

At the WWMA 2009 Annual Meeting held in Los Cruces, New Mexico, industry representatives acknowledged that some details of the specifications for fuel standards are in development. The WWMA Committee believes it is best to be proactive on this item so that Hydrogen stations can be ready to make retail sales.

At the SWMA 2009 Annual Meeting, the SWMA L&R Committee heard a recommendation from a state that as the test methods are developed they get published. They also requested that documentation be produced on the effects of hydrogen if they exceed certain property values listed in the table “Hydrogen Fuel Quality Specification,” and why this is important in the testing of hydrogen.

NEWMA reviewed this proposal at their 2009 Interim Meeting and recommends leaving this as a Developing item.

At the NCWM 2010 Interim Meeting, the NIST Technical Advisor provided an updated Table 1. Hydrogen Fuel Quality Specification (refer to L&R Appendix B in this report) that amends the chart to identify which Standards Committee is actively working on the test method under development.

At the 2010 NEWMA and CWMA Annual Meeting no comments were received on this item and both Committees recommended that this item move forward as an Informational item.

At the 2010 NCWM Annual Meeting in St. Paul, Minnesota, the Committee heard from Mr. Jennings, Tennessee, who informed the conference that ASTM is actively working on a hydrogen specification. Until further developed by ASTM there is nothing that can be done on this item. Mr. Jennings would also like to provide users information on what the significance is of each property.

Additional information on this hydrogen proposal and the corresponding hydrogen gas measuring devices code can be found at website: http://www.nist.gov/pml/wmd/lmdg/hydrogen.cfm. For additional information on this item, contact Ms. Lisa Warfield at [lisa.warfield@nist.gov](mailto:lisa.warfield@nist.gov) or (301) 975‑3308.

237-3 I Engine Fuels and Automotive Lubricants Regulation, Section 3.15. Biodiesel and Biodiesel Blends (refer to Item 270-10 in the NCWM 2010 L&R Committee Interim Agenda)

**Source:** Southern Weights and Measures Association (SWMA)

**Purpose:** Amend Section 3.15. Biodiesel and Biodiesel Blends of the Engine Fuels and Automotive Lubricants Regulation to remove the exemption for declaration of biodiesel content on product transfer documents for biodiesel blends up to 5 %.

**Item Under Consideration:**  Amend Section 3.15. Biodiesel and Biodiesel Blends of the Engine Fuels and Automotive Lubricants Regulation.

**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 that 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 shall be disclosed on all transfer documents. **~~on an invoice, bill of lading, shipping paper, or other document.~~** **~~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.

3.15.4. Exemption.

1. Biodiesel blends that contain less than or equal to 5 % biodiesel by volume are exempted from the requirements of Sections 3.15.1.~~,~~ and 3.15.2.**~~, and 3.15.3.~~** when it is sold as “diesel fuel” as required in Section 3.3.
2. Diesel fuel containing less than 1 % by volume biodiesel is exempted from the requirement of 3.15.3
3. 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. However, the term “Contains Biodiesel” or other similar terms shall be used.

(Added 2005) (Amended 2008 and 201X)

**Background/Discussion:** At the 2009 SWMA Annual Meeting held in Clearwater, Florida, 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. Per Mr. Jennings, Tennessee, at least one major truck stop operator has already voiced concerns to the FALS Chairman. 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 felt it was important to start this recommendation and have the FALS Chairman vet the proposal out to all members of the FALS Committee for their comments before the NCWM Interim meeting in January 2010.

**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 that 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.~~,~~ and 3.15.2.**~~, and 3.15.3.~~** when it is sold as “diesel fuel” as required in Section 3.3.

(Added 2005) (Amended 2008 and 20XX)

The SWMA Committee recommends moving this item forward to the NCWM L&R Committee Agenda as a Voting item.

At the 2010 NCWM Interim Meeting, Mr. Hayes, FALS Chairman, 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 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 felt more work is needed.

The L&R and FALS Committee received seven letters (refer to Appendix E) that do not support this proposal as stated, but would support it with amendments. The Committee does support working on this issue and receiving feedback from industry. There is great 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 would like to see this item move forward as a Voting item. This official would like the spring Regional meetings (NEWMA and CWMA) to review and further develop the language. 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.

At the 2010 NEWMA Annual Meeting in Groton, Connecticut, a comment was heard from a stakeholder that the FTC has not changed the existing posting rule. The Committee recommends that this item remain Informational.

At the 2010 CWMA Annual Meeting in Springfield, Illinois, there were several comments stating 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 consumer, marketers, and the environment and renewable fuels. One question that needs to be addressed is: What is the downside of providing this information? A representative of the National Biodiesel Board does not support this proposal and would like to have further discussions and 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. A state official disagrees 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 recommends that the scope include all blending components.

It was recommended by the Committee that this item move forward as an Informational item and that FALS form a task force under their direction, to help further develop this proposal.

At the 2010 NCWM Annual Meeting held in St. Paul, Minnesota, the Committee received numerous letters (refer to Appendix E within the report of the 95th NCWM Annual Meeting [2010]) and heard from fifteen stakeholders and industry representatives, supporting Section 3.15.3 that requires disclosure. A few expressed concerns with several sections of the proposal. Currently, the FTC has the authority to protect consumers and they are looking at requiring product transfer documents. Several stakeholders indicated that they expect FTC to issue a proposed rule on biodiesel in the near future. It would be best if we stayed in line with the FTC ruling on the biodiesel issue. The very low blends seem to be the challenge.

The sections that are of concern to some stakeholders are 3.15.4 (b) and (c), since it conflicts with reporting of taxes collected 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 Committee agreed to allow time for the FALS Committee to receive additional information and further discuss this item.

###### 260 NIST HANDBOOK 133

260-1 V Guidance on Allowing for Moisture Loss and Other Revisions

(This item was adopted.)

**Source:** Moisture Loss Work Group (MLWG).

**Purpose:** Revise and update the 4th Edition of NIST 133 “Checking the Net Contents of Packaged Goods” (2005). Some of the changes were developed to improve the guidance on making moisture allowances.

**Item Under Consideration**: Current changes and recommendations to HB 133 are reflected in Appendix F, Proposed Amendments and Editorial Changes. A working draft document of HB 133 is presented in Appendix G, HB 133, “Checking the Net Contents of Packaged Goods,” 4th Edition, proposed changes for 2011.

**Background/Discussion:** At the 2009 NCWM Interim Meeting in Daytona Beach, Florida, the NIST Technical Advisor gave a presentation to the MLWG titled, “NIST HB 133 Checking the Net Contents of Packaged Goods – An Explanation of Its Statistical Requirements and Approaches to Allowing for Moisture Loss from Packaged Goods.”

The MLWG reviewed draft changes it developed to revise and update HB 133. Some of the proposed changes and recommendations were developed to improve the guidance on making moisture allowances. It was requested that comments or concerns regarding the draft changes be submitted to the NIST Technical Advisor. It was recommended that the states distribute this document to interested parties within their state for comment. The MLWG met Sunday, July 12, 2009, at the Annual Meeting in San Antonio, Texas, to consider any comments received prior to the meeting.

The U.S. Department of Agriculture (USDA), Food Safety and Inspection Service (FSIS) issued a final ruling on 9 CFR parts, 317, 381, and 442 (refer to the NCWM Publication 15, 2009 NCWM Interim Meeting Agenda, Table B, Appendix B) “Determining Net Weight Compliance for Meat and Poultry Products,” that states the procedures set forth for determining “net weight compliance.” This ruling requires the use of the 4th Edition of HB 133 for all inspections of packages of meat and poultry products subject to federal law and USDA regulations effective October 9, 2008. Therefore, the incorporated provisions of NIST HB 133 do not serve merely as compliance guidance, but are a part of the meat and poultry products inspection regulations.

To be consistent with this final rule, state and local officials must determine net weight compliance for meat and poultry products, including single-ingredient, raw poultry, in a manner that includes the free-flowing liquids as part of the product and not part of the tare weight.

The MLWG updated HB 133 Section 2.3., Basic Test Procedure, to be consistent with 9 CFR parts, 317, 381, and 442. That means removing any reference to the “wet tare” method for determining net weight of USDA restricted products, since the FSIS considers free-flowing liquid to be part of the product.

At the CWMA 2009 Annual Meeting held May 3 - 6, 2009, in St. Louis, Missouri, the Committee recommended support of this item after reviewing the current proposed revisions (refer to CWMA’s 2009 Annual Report) to HB 133. Comments documented during open hearings included the following recommendations from an industry representative:

1. Chapter 1-3 – add “compliance” to the reasons listed since manufacturers “overpack” to meet current regulations;
2. Chapter 1-2 – “moisture” should be inserted in front of allowance (last paragraph of page L&R ‑ C5); there is a need to recognize that other products may be subject to moisture loss for which allowances have not been established; and
3. Chapter 2-3 and Chapter 2-5 – the dates referenced can be removed since they are already in the past. The representative cautioned that this proposal does not “finish” the issue with moisture loss.

The CWMA position is there are two questions which remain unanswered: 1) What guidance can be provided for manufacturers with products other than those listed for moisture loss?, and 2) What methodology is necessary for manufacturers to demonstrate the data needed for a moisture allowance?

A state regulator objected to this proposal as a Voting item and stated that members cannot vote on this item since the information will not be available until the July meeting. The official recommended that the proposal be moved to Informational. The regulator acknowledged that HB 133 is a NIST publication, but stated that due process must be provided since the NCWM does vote to adopt the changes in this handbook. At the CWMA voting session, the membership voted not to accept the recommendation of the Committee and recommended the item be made Informational.

At the 2009 NEWMA Annual Meeting, held May 11 - 14, 2009, in South Portland, Maine, the Committee recommended support of this item. The group discussed the meaning of “editorial” and agreed that due to the volume of changes being recommended, the correct process is to review all comments received, and then have a vote on them by the NCWM. A state official suggested that the document be distributed over the NIST Commodities Server List. A recommended change to HB 133 Chapter 2, Section 2.6., specifically references the use of glaze with frozen seafood products. It was suggested that wording include other glazed products, such as frozen chicken (i.e., glazed chicken wings).

At the 2009 NCWM Annual Meeting in San Antonio, Texas, the MLWG met on July 12, 2009. A NIST Technical Advisor informed the Committee and the MLWG that the draft HB 133 was sent out mid‑May 2009 to the Weights and Measures Directors, NCWM HB 44 and Commodities list servers, e‑mailed to stakeholders, MLWG attendees, and trade associations. Additional comments and recommendations received were distributed to the Committee.

HB 133 was reviewed in its entirety by the MLWG (refer to the NCWM L&R Committee Report for the 94th Annual Meeting, Appendix F.). Several state officials voiced concern that they had not had ample time to thoroughly review and evaluate the changes. A draft document of HB 133 is located in the NCWM L&R Committee Report for the 94th Annual Meeting, Appendix G.

NIST will incorporate changes from the July 12, 2009, MLWG meeting. NIST will disseminate this information to all stakeholders using their contact point information system and list servers (Weights and Measures (W&M) Directors and the NCWM HB 44 and Commodities list server).

At the 2009 CWMA Interim and the SWMA Annual Meetings, both regions recommended moving the proposed revisions forward as a Voting item at the 2010 NCWM Annual Meeting.

At the 2009 WWMA Annual Meeting held in Los Cruces, New Mexico, the WWMA L&R Committee heard concerns at the open hearings regarding moisture allowance being applied before the package’s errors are determined. The WWMA L&R Committee discussed that there are jurisdictions that use the before and after application process. Software applications currently in use also apply this method. A California official informed the Committee that California policy is to take moisture allowance after the package errors are determined. It was requested that the MLWG remain active to clarify and work on the moisture loss issues. Additional resources need to be found to help support the MLWG. The WWMA Committee recommends movingthis item forward as a Voting item with the following noted changes (refer to the WWMA 2009 Conference Addendum, Appendix A for a detailed description of line items):

* The majority of the WWMA L&R Committee recommended moving forward line Item 7 from the WWMA agenda Appendix A (not accepting line item 8).
  + Section 1.2.(5)a.: The amount of **~~lost~~** moisture loss depends upon the nature of the product, the packaging material, the length of time it is in distribution, environmental conditions, and other factors.

*Revise the first paragraph, last sentence:* For loss or gain of moisture, **~~apply~~** the moisture allowances may be applied before or after the package errors are determined.

* Line Item 25, Section 2.3.8.b. “What are the moisture allowances for flour and dry pet food?” The Committee recommends changing the title on Table 2-3 to read as “Moisture Allowances for Product in Distribution.” This could help the Inspector from potentially applying an incorrect test procedure at a production facility.
* Line item 29, Section 2.3.8.d. “What moisture allowance is used with wet tare when testing packages bearing a USDA seal of inspection?” should read as: When there is free-flowing liquid and liquid **~~or absorbent~~** absorbed by packing materials in contact with the products, all free liquid and the absorbed liquid is part of the wet tare.

* Remove line Item 30, Section 2.3.8.e. “How is moisture loss handled for products not listed in HB 133?” in its entirety and retain as a Developmental item with future work to be done by the MLWG.
* Line Item 61, Section 3.10.a. “How are packages of peat and peat moss labeled by compressed volume testing?” modify the second sentence to add the underlined words and graphic:
  + **For each dimension (length, width, and height) take three equidistant measurements, take the average of each respective dimension and multiply to determine the cubic measure as follows:**

**Average height X average width X average length = cubic measurement**

At the NEWMA 2009 Interim Meeting, officials reviewed the changes, located in Appendix A, of language deemed “editorial changes.” While NEWMA supports the majority of “editorial changes,” they have concerns that some of the changes go beyond “editorial” and requests that the language proposed for inclusion on Section 2.3.8. Question (e) on page 25 by [Kraft: Paul Hoffman (7/09)] be removed from the editorial changes. NEWMA felt the language proposed for that section is repetitive and that it already exists in other Federal Law.

A state official also requested language previously included in the 3rd edition of HB 133, but was omitted from the 4th edition, be included in the newest revision. That language addresses the issue of gray area as it pertains to moisture content and moisture loss. NEWMA also recommends a mocked up copy of HB 133 with highlights of changes be posted on the NIST website.

At the NCWM 2010 Interim Meeting held in Nashville, Tennessee, the MLWG met on Sunday, January 24, 2010, to review the line item changes located in Appendix A, Table of Proposed Amendments and Editorial Changes for HB 133, *Checking the Net Contents of Packaged Goods* (refer to the NCWM 2010 Interim L&R Agenda). Participants in the meeting provided and discussed their input into each line item to the L&R Committee.

During the open hearings, a state official recommended that this item under consideration be moved forward as a Voting item. Comments were heard on the following line items (refer to Appendix A from the NCWM 2010 Interim L&R Agenda) during the open hearings:

* Line item 3, Section 1.1.a.(3) – Amend sentence 7. If the weights and measures jurisdiction conducting the inspection does not have access to other retail locations, wholesalers or point of pack location(s) then the weights and measures authorities having jurisdiction in those locations should be contacted and asked to conduct an inspection at those locations to determine the cause of the findings.
  + Mr. Guay, P&G, recommends that the word “should be replaced with “. locations ~~should~~ it is recommended that they be contacted and asked to conduct”.
* Line item: Section 1.2.(5).a – For loss or gain of moisture**, ~~apply~~** the moisture allowances may be applied before or after the package errors are determined.
  + Two state officials recommend that there are currently two methods of computation. They both encourage that one method be selected and they prefer for moisture loss only be applied after.

* Line item 25: Section 2.3.8(b).
  + A California state official recommends for USDA inspection for wet tare only that the language read “packed and labeled” at a USDA facility.
* Line item 31-33: Section 2.3.8.e “How is moisture loss handled for products not listed in HB133”
  + L&R Chairman stated that these items will be removed for consideration and returned to the Moisture Loss Work Group (MLWG) for further development and clarification.
* Line item 65: 3.12. – Ice Cream Novelties
  + Ms. Cary Frye, VP Reg. and Scientific Affairs from the International Dairy Ice Cream Association supports the change to the pelletized ice cream. She is working with the FDA to get clarification for ice pelletized products (non-dairy) (refer to 232-2 of this report)
* Line item 10a: 3.11.b. –Specifications for Test Measures for Mulch and Soils.
  + Mr. Bob LaGasse, Mulch and Soil Council, spoke regarding the editorial change that left out the 12 x 12 x 24 measure.

The NIST Technical Advisor informed attendees that additional changes will occur on item 2.6. “Drained Weight for Glazed or Frozen Foods.” Seafood testing training was held in January 2010 in Topeka, Kansas, and has provided recommended changes to the L&R Committee for inclusion into HB133. Ms. Judy Cardin provided the Committee with a “Glazed Seafood Worksheet” and a “Glazed Seafood Package Report” to be added to Appendix E of HB 133. The NIST Technical Advisor will incorporate these changes into Appendices F and G in the 2010 Interim L& R Report.

The Committee recommended that the item under consideration be moved forward as a Voting item.

At the 2010 NEWMA Annual Meeting in Groton, Connecticut, a comment was made on line item 8 (Appendix F), Section 1.2(5)a. that adjustments should not be made to the test data, but adjustments should be made to test results determining the criteria. Proposed revision to line item 8: 1.2.(5)a. last line to read:

You may apply an allowance after determining the **package** errors by **~~an amount equal to the moisture~~** **adding the**allowance **~~to adjust the average error adding the allowance~~** to the SEL and MAV and then reevaluating sample compliance.

There was concern that the test procedures do not take into account non-conforming size samples (e.g. 80 lbs block of frozen seafood). The Committee recommends that the seafood test procedure be reviewed to accommodate different sampling sizes. NEWMA supports this item as a Voting item with the above stated revisions.

At the 2010 CWMA Annual Meeting in Springfield, Illinois there were no comments heard on this item. It was recommended by the Committee that this item move forward as a Voting item.

At the 2010 NCWM Annual Meeting held in St. Paul, Minnesota the Committee’s recommendation is to adopt as revised below. Line item numbers are how they appear in Pub. 16. Appendix F.

* Line Item 8. - First paragraph – move the parenthesis to enclose the title of the Section.

To apply a moisture allowance before determining package errors, adjust the Nominal Gross Weight (see Section 2.3. “Basic Test Procedure”**~~)~~** – Determine Nominal Gross Weight and Package Errors for Tare Sample**)** so the package errors are increased by an amount equal to the moisture allowance.

* Line Item 8. – second paragraph third sentence:

You may apply **~~an~~** a moisture allowance after determining the **package** errors by **~~an amount equal to the moisture~~** **adding the allowance** **~~to adjust the average error adding the allowance~~** to the SEL and **then, comparing the average error to the SEL to determine compliance. The moisture allowance must also be added to the** MAV **before evaluating sample errors to identify unreasonable minus errors. ~~and then reevaluating sample compliance.~~**

* Line Item 22. - replace current language with:

**When no predetermined allowance is found in HB133, the potential for moisture loss must be considered.**

**Inspectors should follow their jurisdiction’s guidance for making their determination on an acceptable moisture allowance.**

* Line Item 24 – replace with: **Table 2-3. Moisture Allowances**
* Line Item 25 replace first paragraph

**Wet 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 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 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]).**

* Line Item 41 amend to read as follows:

For **ice** glazed seafood, **meat, poultry or similar products ~~and fish~~**, determine the net weight after removing the glaze using the following procedure. Use this method for any **~~frozen~~ ice** glazed food product.

* Line Item 43 amend Step 1 to read as:

Add in the following language: Take out Step 1 and replace with the following language.

**Use an official inspection report to record the inspection information. Attach additional worksheets, test notes, and other information as needed. This handbook provides an ice glazed seafood worksheet and package report form in Appendix E. Modify the worksheet, package report and the box numbers to meet your agency's needs. Other formats that contain more or less information may be acceptable.**

* Line item 44: Petroleum **~~15~~** **15.6** °C (60 °F)
* Line item 54: Replace figure 3-1 and replace with a pictograph of a frozen novelty or similar item on a stick.
* Line item 57: Put back into HB133 the figure of the stacking pattern of logs and bundle firewood that was in an older version of HB 133.
* Line items 67, 68, 69, and 70 add the word “**Ice**” as the first word in the title of the Seafood worksheets and reports.
* Editorial Item:

Place the conversion charts located in HB44, Appendix C into an Appendix in HB133.

It was recommended that the MLWG continue to work on how moisture loss is handled for products not listed in HB 133 (refer to Appendix H. line item 28 in this report.) The NIST Technical Advisor stated that the work group will continue to work on any outstanding items concerning moisture loss. A question was asked on what the HB 133 edition number would be, since many Federal agencies have adopted the fourth edition. An official stated that federal agencies need to adjust their own rules if they consider adopting a new edition.

260-2 V Seed Count for Agricultural Seeds (refer to Item 270-5 in the NCWM 2010 L&R Committee Interim Agenda)

(This item was adopted.)

**Source:** Central Weights and Measures Association (CWMA)

**Purpose:** To adopt a test procedure for inspection of bulk agricultural seed (specifically corn seed, soybean seed, field bean seed, and wheat seed) labeled by “count,” taking account of this prevalent method of sale and the value to the seed industry and farmers arising from an accurate, practical, efficient, and uniform method.

There is a current standard adopted by the Association of Official Seed Analyst (AOSA) which is broadly accepted by industry. Several states adopt both the AOSA standard and the HB133 regulation, which causes confusion due to conflicting Maximum Allowable Variations (MAV). The MAVs in HB 133 are not considered appropriate for seed counts in which counts can be as high as a 200 000.

**Item under Consideration:** Amend HB 133 by adding a new Section 4.11. Rules for Testing Seeds and amending Tables 1-1. and 2-10. to provide for a uniform, practical, and accurate method for conducting inspections of specified agricultural seed varieties when labeled and/or sold by “count.” There is consensus among the seed industry, state seed control officials, and academics in support of the AOSA standard for seed counting. This standard should be adopted as part of HB133 to ensure that seed is sold with an accurate count.

American Seed Trade Association (ASTA) requests (see Appendix G, ASTA Seed Count Rule for Agriculture Seeds) that HB 133, Section 4.2. Packages Labeled by Count be amended by adding the language from AOSA “Rules for Testing Seeds,” Section 12: Mechanical Seed Count (see below with incorporated changes) as Section 4.11. of HB 133, to be titled “Procedure for Checking the Content of Certain Agricultural Seed Packages Labeled by Count” (see Appendix H, AOSA, Section 12: Mechanical Seed Count).

HB 133 Section 4.2. Amended to read:

* 1. **Packages Labeled by Count**

**How are packages labeled by count tested?**

If the labeled count is more than 50 items with the exception of corn, soybeans, field beans, and wheat seeds**, see** Section C 4.4. “Packages Labeled by Count of More than 50 Items.” If the labeled count is more than 50 items for corn, soybeans, field beans, and wheat seeds, see Section 4.11 “Procedure for Checking the Contents of Specific Agricultural Seed Packages Labeled by Count.**”**

Amend title of Table 2-10. (HB133, Appendix B) to read:

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 Fewer than 50 Items, and Specific Agricultural Seeds Labeled by Count.

Amend Table 2-10. to include an additional row as shown below:

|  |  |
| --- | --- |
| **Specific Agricultural**  **Seeds Labeled**  **By Count** | **The MAVs are:**  **For corn seed: 2 % of the labeled count**  **For soybean seed: 4 % of the labeled count**  **For field bean seed: 5 % of the labeled count**  **For wheat seed: 3 % of the labeled count** |

Amend HB 133, Appendix A, Table 1-1. to adjust for the new name of Table 2-10. (“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 Fewer than 50 Items, and Specific Agricultural Seeds Labeled by Count”)**.**

AOSA Section 12.6. Rules for Testing Seeds - modified for consideration as a new Section 4.11 to HB 133.

**12.6. Tolerances Maximum Allowable Variations ~~for results from different laboratories.~~**

Multiply the labeled seed count **~~or first seed count test result~~** by 4 % for soybean samples, 2 % for corn (round, flat or plateless) samples, 5 % for field bean samples and 3 %for wheat samples. Express the **~~tolerance~~** **maximum allowable variation**(the number of seeds) to the nearest whole number. Consider the results of two tests in **~~tolerance~~ accord with the maximum allowable variation**if the difference, expressed as the number of seeds, is equal to or less than the **~~tolerance~~** **maximum allowable variation**.

*Example:*

Kind of seed: Corn

Label claim **~~(1st test)~~:** 2275 seeds/lb.

Lab Test **~~(2nd test)~~**: Purity working weight = 500.3 g

Seed count of pure seed = 2479 seeds

Number of seeds per pound = 453.6 g/lb × 2479 seeds = 2247.6 seeds/lb

500.3 g

Rounded to the nearest whole number = 2248 seeds/lb

Calculate **~~tolerance~~ maximum allowable variation**value for corn:

multiply label claim by 2 %

2275 seeds/lb × 0.02 = 45.5 seeds/lb;

rounded to the nearest whole number = 46 seeds/lb

Determine the difference between label claim and lab test:

2275 seeds/lb – 2248 seeds/lb = 27 seeds/lb

The difference between the lab test **~~(2nd test)~~** and the label claim **~~(1st test)~~** is less than the **~~tolerance~~** **maximum allowable variation**(27 < 46); therefore, the two results are in **~~tolerance~~** **accord with the maximum allowable variation.**

**Background/Discussion:** The CWMA held their 2009 Interim Meeting on September 13 - 16, 2009, in Rock Island, Illinois. A representative from ASTA explained a proposal regarding seed count for four types of seeds: corn, soybeans, field beans, and wheat. An item to amend the requirement for testing seeds by count was considered approximately ten years ago, but there was a lack of industry consensus at that time. In the interim, state, federal, university seed regulators, and seed laboratories developed a test method after significant scientific testing to provide acceptable MAVs.

There are modern agricultural methods of farming. Farmers are now requesting the number of seeds on packages in order to accommodate their precision planting methods. Since seed is a natural biological product, it can vary in size and weight. There is currently a standard adopted by the Association of Official Seed Analysts (AOSA) that is broadly accepted. Several states adopt both the AOSA standard and HB 133 regulations which is causing confusion because of the conflicting MAV allowances. The HB 133 regulation is not seed specific; therefore, it does not contemplate items being sold in quantities as high as 200 000 per bag. A letter of support was received from the Association of American Seed Control Officials.

At the NCWM 2010 Interim Meeting, the Committee received numerous letters (refer to Appendix H in the report of the 95th NCWM Interim Meeting [2010]) in support of this item. During the open hearingMs. Maile Hermida, Hogan & Hartson, spoke on behalf of the seed trade association in support of this proposal to modify count. Farmers need information to know how to plant their fields, and there are devices capable available and calibrated. This practice is already used by states that adopt the AOSA method as part of their current seed control law. ASTA and AOSA are in agreement and support this item. Iowa also supports this proposal. Mr. Michael Stahr, President, AOSA, supports this item, stating this is the current standard already in use in some states.

The L&R Committee recommends this item under consideration move forward as a Voting item.

At the 2010 NEWMA Meeting held in Groton, Connecticut, a representative of the seed industry provided an explanation on the background of this item. The Committee recommends this move forward as a Voting item as written.

At the 2010 CWMA Meeting held in Springfield, Illinois, it was noted that the entire Section 12 of the Association of Official Seed Analysts Rules for Testing seeds needs to be made as part of the item. The current item for consideration only has Section 12.6 specified. The Committee also noted that Section 12.6, as printed in the 2010 NCWM Pub. 15 should have been underlined and bolded in full to reflect that it would be an addition to HB 133. In accord with the CWMA’s intent, they recommend the entire section be amended to include:

**SECTION 12: MECHANICAL SEED COUNT**

**The following method shall be employed when using a mechanical seed counter to determine the number of seeds contained in a sample of soybean (*Glycine max*), corn (*Zea mays*), wheat (*Triticum aestivum*) and field bean (*Phaseolus vulgaris*).**

**12.1. Samples.**

**Samples for testing shall be of at least 500 grams for soybean, corn and field beans and 100 rams for wheat and received in moisture proof containers. Samples shall be retained in moisture proof containers until the weight of the sample prepared for purity analysis is recorded.**

**12.2 Seed counter calibration.**

**The seed counter shall be calibrated daily prior to use.**

**(a) Prepare a calibration sample by counting 10 sets of 100 seeds. Visually examine each set to insure that it contains whole seeds. Combine the 10 sets of seeds to make a 1,000 seed calibration sample. The seeds of the calibration sample should be approximately the same size and shape as the seeds in a sample being tested. If the seeds in a sample being tested are noticeably different in size or shape from those in the calibration sample, prepare another calibration sample with seeds of the appropriate size and shape. Periodically re-examine the calibration samples to insure that no seeds have been lost or added.**

**(b) Carefully pour the 1,000 seed calibration sample into the seed counter. Start the counter and run it until all the seeds have been counted. The seeds should not touch as they run through the counter. Record the number of seeds as displayed on the counter read out. The seed count should not vary more than ±2 seeds from 1,000. If the count is not within this tolerance, clean the mirrors, adjust the feed rate and/or reading sensitivity. Rerun the calibration sample until it is within the ±2 seed tolerance. If the seed counter continues to fail the calibration procedure and the calibration sample has been checked to ensure that it contains 1,000 seeds, do not use**

**the counter until it has been repaired.**

**12.3 Sample preparation.**

**Immediately after opening the moisture proof container, mix and divide the submitted sample, in accordance with section 2.2 of the Association of Official Seed Analysts’ (AOSA’s) Rules for Testing Seeds, to obtain a sample for purity analysis and record the weight of this sample in grams to the appropriate number of decimal places (refer to section 2.3 a) of the AOSA’s Rules for Testing Seeds. Conduct the purity analysis to obtain pure seed for the seed count test.**

**12.4 Conducting the test.**

**After the seed counter has been calibrated, test the pure seed portion from the purity test and record the number of seeds in the sample.**

**12.5 Calculation of results.**

**Calculate the number of seeds per pound to the nearest whole number using the following formula:**

**Number of seeds per pound = 453.6 g/lb × no. of seeds counted in 12.4 divided by the weight (g) of sample analyzed for purity**

**12.6. ~~Tolerances~~ Maximum Allowable Variations**

**Multiply the labeled seed count by 4 % for soybean samples, 2 % for corn (round, flat or plateless) samples, 5 % for field bean samples and 3 % for wheat samples. Express the maximum allowable variation(the number of seeds) to the nearest whole number. Consider the results of two tests in accord with the maximum allowable variationif the difference, expressed as the number of seeds, is equal to or less than the maximum allowable variation.**

***Example:***

**Kind of seed: Corn**

**Label claim: 2275 seeds/lb.**

**Lab Test: Purity working weight = 500.3 g**

**Seed count of pure seed = 2479 seeds**

**Number of seeds per pound = 453.6 g/lb × 2479 seeds = 2247.6 seeds/lb divided by 500.3 g**

**Rounded to the nearest whole number = 2248 seeds/lb**

**Calculate maximum allowable variationvalue for corn:**

**multiply label claim by 2 %**

**2275 seeds/lb × 0.02 = 45.5 seeds/lb;**

**rounded to the nearest whole number = 46 seeds/lb**

**Determine the difference between label claim and lab test:**

**2275 seeds/lb – 2248 seeds/lb = 27 seeds/lb**

**The difference between the lab test and the label claim is less than the maximum allowable variation(27 < 46); therefore, the two results are in accord with the maximum allowable variation.**

**(Note: Subsection 12.6 of the AOSA Rule was modified to conform to the NCWM form and style.)**

At the 2010 NCWM Annual Meeting held in St. Paul, Minnesota, there was concern expressed from the floor that the item did not appear in full on the agenda. It was clarified that the information regarding the AOSA standard for mechanical seed count is reflected in the letter from ASTA (refer to Appendix H in the report of the 95th NCWM Annual Meeting.) An AOSA representative discussed the studies that were done to ensure a high level of repeatability. There were numerous states and industry representatives that expressed support for this item.

The item below has been reviewed and modified by the NIST Technical Advisor to conform to the HB 133 structure. Additional modification to the structure may occur upon further review by the NIST Publications Coordinator.

**4.11. Procedure for Checking the Contents of Specific Agriculture Seed Packages Labeled by Count**

1. **How is the number of seeds determined in a sample of soybean, corn, wheat, and field bean, when using a mechanical seed counter?**

**The following method shall be employed when using a mechanical seed counter to determine the number of seeds contained in a sample of soybean (*Glycine max*), corn (*Zea mays*), wheat (*Triticum aestivum*) and field bean (*Phaseolus vulgaris*).**

**Test Equipment**

* **Mechanical seed counter.**
* **Moisture proof container.**

**4.11.1. Test Procedure**

1. **Testing samples shall be received and retained in moisture proof containers until the weight of the sample prepared for purity analysis is recorded. The sample shall be of at least 500 grams for soybean, corn, field beans, and 100 grams for wheat.**
2. **The seed counter shall be calibrated daily prior to use.**

* **Prepare a calibration sample by counting 10 sets of 100 seeds. Visually examine each set to insure that it contains whole seeds. Combine the 10 sets of seeds to make a 1000 seed calibration sample. The seeds of the calibration sample should be approximately the same size and shape as the seeds in a sample being tested.**

**Note: If the seeds in a sample being tested are noticeably different in size or shape from those in the calibration sample, prepare another calibration sample with seeds of the appropriate size and shape. Periodically re-examine the calibration samples to insure that no seeds have been lost or added.**

* **Carefully pour the 1000 seed calibration sample into the seed counter. Start the counter and run it until all the seeds have been counted.**

**Note: The seeds should not touch as they run through the counter. Record the number of seeds as displayed on the counter read out.**

* **The seed count should not vary more than ± 2 seeds from 1000. If the count is not within this tolerance, clean the mirrors, adjust the feed rate and/or reading sensitivity. Rerun the calibration sample until it is within the ± 2 seed tolerance.**

1. **Note: If the seed counter fails the calibration procedure and sample has been checked to ensure that it contains 1000 seeds, do not use the counter until it has been repaired.**

**Immediately after opening the container, mix and divide the sample to obtain a sample for purity analysis. (refer to AOSA rules for testing seeds section 2.2)**

1. **Record the weight of this sample in grams to the appropriate number of decimal places.**
2. **Conduct the purity analysis to obtain pure seed for the seed count test.**
3. **After the seed counter has been calibrated, test the pure seed portion from the purity test and record the number of seeds in the sample.**
4. **Calculation of results.**

* **Calculate the number of seeds per pound to the nearest whole number using the following formula:**

**Number of seeds per pound = 453.6 g/lb × no. of seeds counted divided by**

**the weight (g) of sample analyzed for purity**

1. **Determine the Maximum Allowable Variation**

* **Multiply the labeled seed count by 4 % for soybean, 2 % for corn, 5 % for field bean, and 3 % for wheat.**

**Note: Express the maximum allowable variation(the number of seeds) to the nearest whole number. Consider the results of two tests in accord with the maximum allowable variationif the difference, expressed as the number of seeds, is equal to or less than the maximum allowable variation.**

***Example:***

**Kind of seed: Corn**

**Label claim: 2275 seeds/lb.**

**Lab Test: Purity working weight = 500.3 g**

**Seed count of pure seed = 2479 seeds**

**Number of seeds per pound = 453.6 g/lb × 2479 seeds divided by 500.3 g = 2247.6 seeds/lb**

**Rounded to the nearest whole number = 2248 seeds/lb**

**Calculate maximum allowable variationvalue for corn:**

**multiply label claim by 2 %**

**2275 seeds/lb × 0.02 = 45.5 seeds/lb;**

**rounded to the nearest whole number = 46 seeds/lb**

**Determine the difference between label claim and lab test:**

**2275 seeds/lb − 2248 seeds/lb = 27 seeds/lb**

**The difference between the lab test and the label claim is less than the maximum allowable variation(27 < 46); therefore, the two results are in accord with the maximum allowable variation.**

260-3 I HB 133, Chapter 4.7. Polyethylene Sheeting - Test Procedure ‑ Footnote Step 3 (refer to Item 270‑7 in the NCWM 2010 L&R Committee Interim Agenda).

**Source:** Western Weights and Measures Association (WWMA)

**Purpose:** Update HB 133, Chapter 4.7 Polyethylene Sheeting – Test Procedure to provide new density values for heavier density plastics that are currently in the marketplace.

Polyethylene bags labeled as “High Density,” or HDPE, have been found to package products whose labeled net weights meet calculated target net weights when employing a density factor of 0.92 g/cm³. When a density factor of 0.95 g/cm³ is used, as appropriate, in the calculation for high density polyethylene materials, these products commonly fail to meet the calculated target net weight. Further testing of these packages of polyethylene bags reveals that one or more of the labeled width, thickness, or count statements are inaccurate. HDPE product distributors that place a net weight statement on their packages based upon the Linear Low Density Polyethylene (LLDP) density value (0.92 g/cm³) have an approximately 3 % advantage over the distributor that uses the correct, high density, factor.

**Item Under Consideration:** Amend the asterisked footnote below Step 3 as follows:

**\***Determined by ASTM Standard D 1505-98 (or latest issue)“Standard Method of Test for Density of Plastics by the Density Gradient Technique.” For the purpose of this handbook,when the actual density is not known,the minimum densityused to calculate the target net weightshall be 0.92 g/cm³ **~~when the actual density is not~~ ~~known~~.** For products labeled “High Density, HDPE, or similar wording, the minimum density (d) used to calculate the target net weight shall be 0.95 g/cm³.

**Background/Discussion:** A proposal was presented at the WWMA 2009 Annual Meeting in Los Cruces, New Mexico, that manufacturers and distributors of polyethylene bags labeled as “High Density,” or HDPE, have been found to package products whose labeled net weights meet calculated target net weights when employing a density factor of 0.92 g/cm³. When a density factor of 0.95 g/cm³ is used, as appropriate, in the calculation for high density polyethylene materials, these products commonly fail to meet the calculated target net weight. Further testing of these packages of polyethylene bags reveals that one or more of the labeled width, thickness, or count statements are inaccurate.

For example, a box of HDPE has stated dimensions of 24 in x 40 in x .4 mil, and a count of 250. Using the only density factor found in HB 133, 0.92 g/cm³, the calculated target net weight, and that shown on the label, would be 6.38 lbs. If using the actual density factor for the HDPE bags of 0.95 g/cm³, the target net weight would be 6.59 lb. This means that HDPE product distributors that place a net weight statement on their packages based upon the Linear Low Density Polyethylene (LLDP) density value (0.92 g/cm³ have an approximately 3 % advantage over the distributor that uses the correct, high density, factor.

When the original testing procedure was developed, HDPE bags had not yet entered the marketplace. Currently, this product is quite prevalent in the United States. Amending the test procedure will aid weights and measures inspectors in enforcing labeling requirements that allow true value comparisons and close a loophole within HB 133.

The 2009 WWMA Association supports this item and recommends that it be a Voting item.

NEWMA reviewed this item at their 2009 Interim Meeting and proposes this item be a Developing item.

At the NCWM 2010 Interim Meeting, the Committee heard comments for this item and Item 232-1 (L&R 2010 NCWM Interim Agenda) together at the open hearings. The Committee heard support for the suggestion that the density factor should change from 0.92 g /cm³ to 0.95 g/cm³. A California official stated that the information provided by the Western was data extracted from Internet searches. Currently, manufacturers are complaining that under current practice, they cannot compete fairly.

Mr. Jackelen, Berry Plastics, urged the Committee to reject this proposal. Mr. Jackelenstated that 0.92 g/cm³ currently works for manufacturers and that changing it to 0.95 g/cm³ will cause undue cost and waste. Most manufacturers do not make high density (HD) bags, but are producing blends. Mr. Jackelen also stated an additional reason to reject the proposal is 0.95 g/cm³ bags, if punctured will continue to tear.

A Weights and Measures Official stated that if you use the term HD, then you are bound by the 0.95 g/cm³ density. If you use the length x width x thickness x density to determine the net weight, then the density needs to be added to the package labeling. Another official stated that manufacturers should consider disclosing the density factor on every product as part of the labeling. It was voiced that if there are questions about an absolute 0.95 g/cm³ density then there should be an alternate suggestion. Another official stated that 0.95 g/cm³ will be factored in when the density is not known. The Committee received letters that were reviewed on this item (refer to Appendix I within the report of the 95th NCWM Annual Conference.) The Committee recommends moving the item under consideration forward as a Voting item.

At the 2010 NEWMA Annual Meeting in Groton, Connecticut, there was concern that there appears to be a lack of data on this item. It was not reviewed by all regions and not presented to industry to get comments. The Committee felt that this item was not an emergency and would like to review comments received by all the regions and industry.

At the 2010 CWMA Annual Meeting in Springfield, Illinois, there were no comments heard on this item and the Committee recommends that this item remain a Voting item.

At the 2010 NCWM Annual Meeting in St. Paul, Minnesota, an official stated that his comments were the same as he expressed in Item 232-4 of this report. The official stated that with the amendments recommended by an other official expressed in Item 232-4, he would support this proposal. There is agreement that the role of the Conference is not to determine quality issues, but rather to set testing standards for inspectors. Moving this item to Informational status will allow time to receive additional information and data from manufacturers of polyethylene.

The Committee believes that additional work needs to be done on this item including reviewing the labeling requirement of polyethylene. This may include requiring a mandatory statement and review of ASTM standards. The status of this item was changed to Informational during the 2010 Annual Meeting.

260-4 W HB 133, Chapter 4.7. Polyethylene Sheeting Test Procedure – T-shirt/cut-out bags (refer to Item 270-8 in the NCWM 2010 L&R Committee Interim Agenda)

(This item was withdrawn.)

**Source:** Western Weights and Measures Association (WWMA)

**Purpose:** To offer guidelines on how to determine the net weights of the high density polyethylene “t-shirt” bags.

**Item Under Consideration:** Amend Chapter 4.7. Polyethylene Sheeting – Test Procedure as follows:

**When testing “t-shirt” or other bags with cut-outs for handles use the following guideline to determine the target net weight amount of product cut-out of the original bag and removed from the container prior to packaging:**

**Calculate the target net weight in pounds of the bags as if there were no cut-out area:**

**T x A x D x 0.03613 x Ct. x 2 = Z**

**Calculate target net weight in pounds of the cut out area of bags (A) by multiplying TNW x the Handle Cutout % as found in Table 4.7.(a).**

**To determine the target net weight (X) of the package of t-shirt bags, subtract TNW-A.**

**TNW = Calculated Target Net Weight**

**A = Calculated Target Net Weight of cut-out area**

**X = Target net weight of “T-shirt” bags**

**Example: A package of t-shirt bags is labeled 12 in x 7 in x 22 in, 0.3 mil, 2000 count,**

**0.0003 x [(12+7) x 22 x 2] x 0.95 x 0.03613 x 2000 = 17.216,**

**17.216 lbs x 0.107 (from Table 4.7(a) = 1.84 lbs,**

**17.216 lbs – 1.84 lbs = 15.37 lbs, the target net weight for the t-shirt bag container.**

|  |  |  |
| --- | --- | --- |
| **Table 4.7.(a)** | | |
| **LENGTH (in)** | **TOTAL WIDTH**  **FACE WIDTH + GUSSET WIDTH (in)** | **HANDLE CUT-OUT Percent (%)** |
| **14.0 to 16.5**  **16.6 to 18.5** | **12.0 to 16.5**  **12.0 to 16.5** | **16.27 %**  **15.60 %** |
| **17.0 to 18.5**  **18.6 to 19.5**  **19.6 to 20.5**  **20.6 to 22.0**  **22.1 to 23.5** | **16.6 to 19.75**  **16.6 to 19.75**  **16.6 to 19.75**  **16.6 to 19.75**  **16.6 to 19.0** | **13.10 %**  **12.40 %**  **12.65 %**  **10.70 %**  **9.63 %** |
| **22.0 to 24.0**  **24.1 to 25.5** | **19.76 to 22.0**  **19.76 to 22.0** | **10.40 %**  **8.35 %** |
| **28.0 to 32.0**  **32.1 to 36.0** | **22.0 to 24.0**  **22.0 to 24.0** | **7.10 %**  **6.04 %** |
| **28.0 to 32.0**  **32.1 to 36.0** | **24.1 to 26.0**  **24.1 to 25.0** | **6.20 %**  **5.14 %** |

**Background/Discussion:** At the2009WWMA Annual Meeting held in Los Cruces, New Mexico, this proposal was submitted. Over the past several years, there has been a rapid expansion of the production and distribution of high density polyethylene “t-shirt” (grocery) bags. The current directions for calculating the target net weight of packages containing these bags offer no guidelines on how to determine net weight. Calculating the net weight of the cut-out area has been a challenge. It has been difficult to ensure that the weight statements on the packages are accurate. Spectrum Plastics Inc. located in Los Angeles County, California, developed, with the assistance of an engineering firm, a table (above) to provide guidelines to calculate the amount of cut-out area.

The 2009 WWMA L&R Committee did not feel that sufficient background data was submitted from various sources. There are a large number of distributers of domestic and imported products with these types of bags. The HDPE shopping bags are a significant portion of the market. However, once additional data is received and validated, a proposed method of testing of the target net weights could save field testing time. They recommend this proposal be Developing.

NEWMA reviewed this proposal at its 2009 Interim Meeting and recommends it be a Developing item.

At the NCWM 2010 Interim Meeting, a comment was heard from a state official that they recommend this item remain a Developing item and that a template test procedure similar to the procedure for checking the area measurement of chamois be incorporated. The Committee reviewed this item and felt that there was not enough information and data to support this proposal. The Committee would also like to see comments and recommendations from industry. The Committee is Withdrawing the proposed item under consideration and recommends that it be returned to the WWMA for further development and clarification.

At the 2010 NEWMA Annual Meeting in Groton, Connecticut, there was concern that there appears to be a lack of data on this item. It was not reviewed by all regions and not presented to industry to get comments. The Committee felt that this item was not an emergency and would like to review comments received through all regions and industry.

At the 2010 CWMA Annual Meeting in Springfield, Illinois, there were no comments heard on this item and the Committee recommends that this item be Withdrawn.

At the 2010 NCWM Annual Meeting in St. Paul, Minnesota, an official stated his comments on this proposal were the same as stated in Item 232-4. This official spoke that it is recommended to make an amendment be done to the item and insert “for products labeled HD when the D is not on the package label use 0.95 g/cm³, they would fully support this proposal. It is not the role of the Conference to address quality issues, but to have a level playing field for inspectors to test a product. Moving this item to Informational status will allow time to receive additional information and data from manufacturers of polyethylene.

The Committee received one letter asking for the Withdrawal of this proposal and California submitted material safety data sheets from several companies (refer to Appendix H within the report of the 95th NCWM Annual Meeting [2010]).

260-5 W HB 133, Method of Measurement of the Volume of Bagged Mulch (refer to Item 270-11 in the NCWM 2010 L&R Committee Interim Agenda)

(This item was withdrawn.)

**Source:** Southern Weights and Measures Association (SWMA)

**Purpose:** Update HB 133 for the volume measurement of bag mulch, and update moisture allowance, decomposition and specification changes for testing bag mulch.

**Item Under Consideration:** Amend HB 133

* Chapter 2, Section 2.3. Basic Test Procedure, “Moisture Allowances”:

**The purchase date of the bagged mulch product needs to be known, so that an adjustment to the bagged mulch may be made to reflect decomposition since the purchase date.**

* Chapter 3, 3.11. Mulch and Soils Labeled by Volume - Add a bulleted item:

**The decomposition of wood mulch occurs over a period of time. The purchase date of the product needs to be known, so that an adjustment to the product may be made to reflect decomposition since the purchase date.**

* Chapter 3, 3.11. Revise Table 3-4 “Specifications for Test Measures for Mulch and Soils” 56.6 L (2 ft**3)** bag measure for bag mulch 30.48 cm (12 in) X 30.48 cm (12 in) X 60.96 cm (24 in)

**Background/Discussion:** Mr. Chuck Tomlinson, Amerigrow, was unable to attend the SWMA 2009 Annual Meeting in Clearwater, Florida. Mr. Gray briefed the SWMA conference on this proposal (refer to Appendix L, Amerigrow Mulch Proposal) for bag mulch. Bag mulch is a type of product that suffers from decomposition and desiccation and turns to dirt as it ages. However, no lot number, expiration date, or date of pack is being placed onto bags to determine its age.

Amerigrow recommends adding language within HB 133 stating that the purchase date of the product needs to be proven so that reasonable adjustments can be made to reflect the decomposition since the “purchase date.” Amerigrow also stated that mulch bags are easy to tamper with (open and reseal) and that a chain of custody needs to be implemented, beginning with the purchase date. A chain of custody will also assist with determining the age of the mulch and the conditions in which it was stored.

Another issue with bag mulch is that it is available with different grinds that can produce different fill rates when measured in the measuring box specified in HB 133 Table 3-4. Finer mulch does not benefit from rolling the bags and fluffing the mulch. Amerigrow has provided the SWMA with new specifications for the measuring box (56.6 L (2 ft3) bag measure for bag mulch 30.48 cm [12 in] X 30.48 cm [12 in] X 60.96 cm [24 in]).

The 2009 SWMA L&R Committee recommended moving this item forward as a Developing item to the NCWM L&R Committee. The Committee would like industry to be notified of this proposal and seeks additional information and comments.

At the 2010 NCWM Interim Meeting held in Nashville, Tennessee, the Committee heard testimony from Mr. Robert C. LaGasse, Executive Director of the Mulch and Soil Council. He did not support this item and encouraged the Committee to withdraw this item. Mr. LaGasse stated that there is currently no data on the decomposition of wood mulch (air flow/moisture content). He also stated it is not a common practice to require a pack date or expiration date on the packaging of wood mulch.

Mr. LaGasse did support the editorial change in HB133 “Table 3-4. Specifications for Test Measures for Mulch and Soils.” A state official did not see the necessity of this proposal. The editorial changes mentioned during the open hearings are addressed under Item 260-1 as editorial changes. The Committee recommends that the item under consideration be Withdrawn.

At 2010 NEWMA and the CWMA Annual Meetings, no comments were heard on this item and both regions agreed that this item should be withdrawn.

260-6 V National Pasta Association - HB 133, Moisture Allowance for Pasta Products

(refer to Item 270‑13 in the NCWM 2010 L&R Committee Interim Agenda)

(This item neither passed nor failed and was returned to Committee.)

**Source:** Southern Weights and Measures Association (SWMA)

**Purpose:** Amend HB 133 by adopting a 3 % moisture allowance for macaroni, noodle, and like products (pasta products).

**Item Under Consideration:** Amend HB133, Chapters 1 and 2, Moisture allowance to be amended as follows and which will incorporate a 3 % moisture allowance for pasta products, adding the language in bold below:

* Chapter 1: Why do we allow for moisture loss or gain?
  + This handbook provides “moisture allowances” for some meat and poultry products, flour, pasta products**,** and dry pet food.
  + Test procedures for flour, pasta products**,** some meat, and poultry are based on the concept of a “moisture allowance” also known as a “gray area” or “no decision” area.
* Chapter 2: Moisture Allowances:
  + What is the moisture allowance for flour, pasta products, and dry pet food? The moisture allowance for flour, pasta products, and dry pet food is 3 % of the labeled net weight.

Note: 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**.**

* Chapter 2: How is the average error for the moisture allowance corrected?
  + This handbook provides “moisture allowances” for some meat and poultry products, flour, **pasta products,** and dry pet food.

**Background/Discussion:** Studies indicate that moisture loss for pasta products is reasonably predictable over time (see Appendix M, National Pasta Association Proposal to Establish a Moisture Allowance for Pasta Products). 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.

At the 2010 Interim Meeting, the Committee heard support for this item from industry and stakeholders. If this item is approved, it will also amend the Moisture Allowance Table in HB133 giving pasta a 3 % moisture allowance. The Committee reviewed the submitted study (refer to Appendix A in the report of the 95th NCWM 2010 Interim Meeting.) The Committee recommends moving the item under consideration forward as a Voting item.

At the 2010 NEWMA Annual Meeting held in Groton, Connecticut, a representative of the pasta industry gave the group an explanation of the item and expressed support for this item as written. The Committee also supports this item.

At the 2010 CWMA Annual Meeting held in Springfield, Illinois, a representative from the National Pasta Association stated the data supports the 3 % moisture allowance. A Weights and Measures 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.

At the 2010 NCWM Annual Meeting held in St. Paul, Minnesota, a representative for the National Pasta Association spoke on behalf of the proposal. This item will allow for a specific moisture loss percentage to be taken. Inspectors will now have a specific number that they can apply to the pasta product. Representatives of several pasta companies spoke in support of this item and stated that it is consistent with numerous studies that have been done. A state director opposes 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. A Weights and Measures 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 felt that the proposal should be voted through, it is important to recognize guidelines for consideration. A pasta association representative also agreed that this work goes back a couple of decades and that 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.

###### 270 Other items – Developing items

**INTRODUCTION**

The NCWM established a mechanism to disseminate information about emerging issues which have merit and are of national interest. Developing items are those items that have not received sufficient review by all parties affected by the proposals or may be insufficiently developed to warrant review by the NCWM L&R Committee. The Developing items listed are currently under review by at least one regional association, subcommittee, or work group (WG).

The Developing items are marked according to the specific NIST handbook into which they fall – HB 130 or HB 133. The Committee encourages interested parties to examine the proposals included in the appendices and to send their comments to the contact listed in each part.

The Committee asks that the regional weights and measures associations, subcommittees, and WGs continue their work to fully develop each proposal. Should an association, subcommittee, or WG decide to discontinue work on a Developing item, the Committee asks that it be notified. When the status of an item changes because the submitter withdraws the item, the item will be listed in a table below. For more details on items moved from the Developing items list to the Committee’s main agenda, refer to the new reference number in the main agenda.

270-1 D Fuels and Lubricants Subcommittee (FALS) (refer to Item 270-2 in the NCWM 2010 L&R Committee Interim Agenda)

**Source:** The Fuels and Lubricants Subcommittee (FALS)

**Purpose:** Update theUniform Engine Fuels, Petroleum Products, and Automotive Lubricants Regulation in HB 130. Another task will be to update the Basic Engine and Fuels, Petroleum Products, and Lubricants Laboratory Publication.

**Item Under Consideration:** FALShasmet since the 2007 Annual Meeting and continues its work on a number of items in addition to preparing a major revision of the Fuel Ethanol Specifications.

**Background/Discussion:** The Subcommittee met on January 24, 2007, at the 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 HB 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.

At the 2009 NCWM Interim Meeting and Annual Meeting, the FALS Chairman informed the Committee that FALS is working toward getting changes made to the language within the document.

At the CWMA 2009 Interim, the WWMA 2009 Annual, the SWMA 2009 Annual, and the NEWMA 2009 Interim Meetings, there were no comments heard. They recommend that this proposal remain a Developing item.

At the 2010 NCWM Interim Meeting, the FALS Chairman, Mr. Hayes, informed the Committee that FALS is still working on this project. No comments were heard during the open hearings, and the Committee agrees that this item should remain a Developing item.

At the 2010 NEWMA Annual Meeting held in Groton, Connecticut, no comments were heard on this item. The Committee recommends that this item remain Developmental.

At the 2010 CWMA Annual Meeting held in Springfield, Illinois, the NIST Technical Advisor provided information that NIST has begun work on the development of a handbook for State fuel laboratories.

At the 2010 NCWM Annual Meeting in St. Paul, Minnesota, a comment from a petroleum representative stated that this item is premature and that action needs to be taken by the Environmental Protection Agency (EPA). Mr. Hayes, FALS Chairman, clarified that this item is for a laboratory guide and that FALS supports NIST efforts to develop a handbook for state fuel laboratories. The item mentioned by the petroleum representative is for a new proposal that is being submitted through the regions modifying HB 130 as a result of a potential EPA waiver for gasoline containing more than 10 volume percent ethanol.

If you would like to participate in this Subcommittee, contact Mr. Ron Hayes, Chairman Fuels and Lubricants Subcommittee, at (573) 751‑2922, e‑mail: [ron.hayes@mda.mo.gov](mailto:ron.hayes@mda.mo.gov), or Mr. David Sefcik, NIST at (301) 975‑4868, e‑mail:  david.sefcik@nist.gov

270-2 I Ice Glazed Seafood Forum

**Discussion/Background:** An ice-glazed seafood forum was held on Sunday July 11, 2010. Ms. Judy Cardin, Wisconsin, gave a briefing on the multistate investigation with ice-glazed seafood. All states that participated in the investigation found issues with ice-glazed seafood and net weight packages.

Mr. Steve Wilson, National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Services Seafood Inspection Program (NMFS SIP), informed attendees that NOAA plans to adopt HB133 MAV’s within the next month. NMFS SIP will work closely with NIST to study how variability between SIP’s current methodology and HB133 can be removed. NMFS offered training to states and also to assist with investigations or inspections. NMFS will also seek ways to work with the Customs and Border Protection on the feasibility in the traceability of product through the supply chain.

Ms. Lisa Weddig, National Fisheries Institute (NFI), is committed to ending intentional fraud with short weighing. NFI members want regulators to also focus on those who are blatantly cheating the system. Educating its members on good quantity control practices and test procedures is a priority.

For more information regarding this item, contact Ms. Judy Cardin at judy.cardin@wisconsin.gov.

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Mr. Joe Benavides, Texas, Chairman

Mr. Raymond Johnson, New Mexico

Ms. Jonelle Brent, Illinois

Mr. John Gaccione, Westchester County, New York

Mr. Terence McBride, Tennessee

Mr. Ron Hayes, Missouri, Chairman FALS

Mr. Doug Hutchinson, Canada, Technical Advisor

Mr. Rob L. Underwood, Associate Member Representative

Ms. Lisa Warfield, NIST Technical Advisor: e-mail: lisa.warfield@nist.gov

Mr. David Sefcik, NIST Technical Advisor: e-mail: david.sefcik@nist.gov

Mr. Ken Butcher, NIST Technical Advisor: e-mail: kenneth.butcher@nist.gov

**Laws and Regulations Committee**