



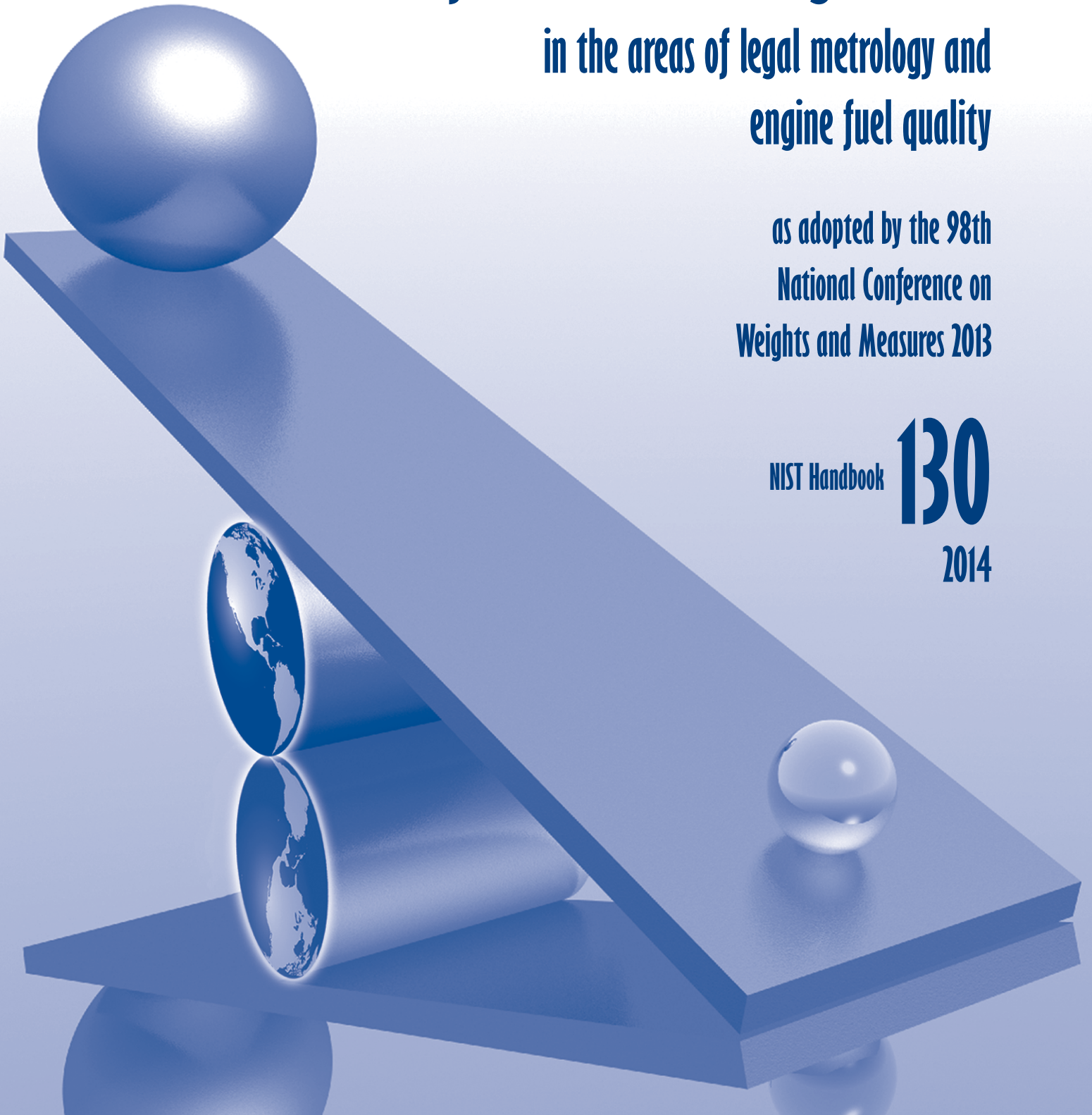
NIST
National Institute of
Standards and Technology
U.S. Department of Commerce

Uniform Laws and Regulations

in the areas of legal metrology and
engine fuel quality

as adopted by the 98th
National Conference on
Weights and Measures 2013

NIST Handbook **130**
2014



I. Introduction

A. Source

The Uniform Laws and Regulations¹ in this handbook comprise all of those adopted by the National Conference on Weights and Measures, Inc. (NCWM). The NCWM is supported by the National Institute of Standards and Technology (NIST), which provides its Executive Secretary and publishes its documents. NIST also develops technical publications for use by weights and measures agencies; these publications may subsequently be endorsed or adopted by the NCWM.

The NCWM Committee on Laws and Regulations (the Committee), acting at the request of NCWM or upon its own initiative, prepares with the technical assistance of the National Institute of Standards and Technology (NIST), proposed amendments or additions to the material adopted by NCWM (see Paragraph C). Such revisions, amendments, or additions are then presented to NCWM as a whole where they are discussed by weights and measures officials and representatives of interested manufacturers, industries, consumer groups, and others. Eventually the proposals of the Committee, which may have been amended from those originally presented, are voted upon by the weights and measures officials, following the voting procedures in the NCWM Bylaws. A national consensus is required on all items adopted by the NCWM. A Uniform Law or Regulation is adopted when a majority of the states' representatives, and other voting delegates favoring such adoption, vote for approval.

All of the Uniform Laws and Regulations given herein are recommended by NCWM for adoption by states when reviewing or amending their official laws and regulations in the areas covered. A similar recommendation is made with regard to the local jurisdictions within a state in the absence of the promulgation of such laws and regulations at the state level.

B. Purpose

The purpose of these Uniform Laws and Regulations is to achieve, to the maximum extent possible, uniformity in weights and measures laws and regulations among the various states and local jurisdictions in order to facilitate trade between the states, permit fair competition among businesses, and provide uniform and sufficient protection to all consumers in commercial weights and measures practices.

C. Amendments

The Committee on Laws and Regulations of NCWM serves as a mechanism for consideration of amendments or additions to the Uniform Laws and Regulations.

D. Submission of Agenda Items – Preamble

NCWM Bylaws require that its officers and committees observe the principles of due process for the protection of the rights and interests of affected parties. Specifically, it requires that the committees and officers: (a) give reasonable advance notice of contemplated studies, items to be considered for action, and tentative or definite recommendations for conference vote, and (b) provide that all interested parties have an opportunity to be heard.

¹ When referring to the Uniform Laws and Regulations in Handbook 130, Laws and Regulations will be capitalized. When referring to general federal or state laws and regulations, no capitalization will be used.

E. Submission Process

Anyone introducing an item to the Committee must initially use the regional weights and measures associations to consider its merits. Using the regional associations ensures discussion and evaluation of items at the grassroots level by involving the regional members in the development, evaluation, and justification of proposals. The regions include the Central, Northeastern, Southern, and Western Weights and Measures Associations. For information on the regional associations, visit www.ncwm.net.

To submit a proposal to a regional association, obtain *Form 15: Proposal to Amend Handbooks* at www.ncwm.net or by contacting NCWM via email at info@ncwm.net. Complete the form and submit it electronically in Microsoft Word format to NCWM at info@ncwm.net and copy the Executive Secretary at owm@nist.gov. An example of the Form 15 template is provided at the end of this section. Instructions for completing the form are included with the electronic version of this template. To ensure that your proposal is included on the regional meeting agenda, submit at least two weeks in advance of the fall regional meeting. Regional meeting schedules are available on the NCWM website.

F. Procedures

The NCWM Committee will consider items according to the following procedures:

1. NCWM Committees receive new items from regional associations, National Type Evaluation Technical Committees (Sectors), task groups, and subcommittees and as defined in Sections H and I. All items to be considered by the Committee for action at the upcoming Interim Meeting must be submitted electronically in Microsoft Word format to NCWM by November 1.
2. NCWM will ensure that all committee members and technical advisors receive complete copies of all new items for consideration at the upcoming NCWM Interim Meeting.

G. Criteria for Inclusion on the NCWM Committee's Agenda

1. Any item approved by at least one regional association and received by the November 1 deadline will be automatically placed on the Committee's Interim Meeting agenda.
2. Items that have not been approved by a regional association, but which are received by November 1, will be evaluated by the Committee using the criteria in Section H, Exceptions to Policy, and Section I, Committee Agenda.
3. Any proposal received after the November 1 deadline, but prior to the Interim Meeting, will be evaluated by the Committee according to Section H, Exceptions to Policy and Section I, Committee Agenda. Only those items determined to be a national "priority" will be included on its agenda.
4. Proposals must be in writing and must include:
 - a. a concise statement of the item or problem outlining the purpose and national need for its consideration. An electronic copy of the background material and proposed amendment(s) should be submitted in a Microsoft Word format on a CD ROM, DVD, or by electronic mail sent to info@ncwm.net;
 - b. background material, including test data, analysis of test data, or other appropriately researched and documented material for the Committee to evaluate when deciding its position or future activity on the proposal;
 - c. proposed solutions to problems stated in specific language and in amendment form as changes to Conference documents; and

- d. if a proposal involves a new area of weights and measures activity; practical, realistic, and specific recommendations for laws or regulations to be adopted and test methods to be utilized to provide for proper enforcement.

When proposals are to modify or add requirements to existing publications, such as Handbook 130, *Uniform Laws and Regulations in the Areas of Legal Metrology and Engine Fuel Quality*, or Handbook 133, *Checking the Net Content of Packaged Goods*, the proposal should:

- 1) identify the pertinent portion, section, and paragraph of the existing publication that would be changed (e.g., Uniform Method of Sale of Commodities Regulation, Section 8.2, paragraph (b));
- 2) provide evidence of consistency with other NCWM publications such as with other uniform laws and regulations;
- 3) provide evidence of consistency with federal laws and regulations (e.g., U.S. Department of Agriculture [USDA] or Federal Trade Commission [FTC] regulations); and
- 4) relay the positions of businesses, industries, or trade associations affected by the proposal including supporting and opposing points of view.

H. Exceptions to Policy for Submission of Items to the NCWM Committee Agenda; Submission of “Priority” Items

The Committee will use the following criteria to evaluate items that have not been approved by a regional association, but have been received by the November 1 deadline. If an item is received after the November 1 deadline, it will be included on the agenda if the Committee determines that it is a national “priority.”

Criteria for Inclusion on the Committee’s Agenda When No Regional Association Has Approved the Item.

1. Items must have significant legal impact on weights and measures laws and/or regulations involving:
 - a. court cases/attorney general opinions; or
 - b. preemption by federal statute or regulation; or
 - c. conflicts with international standards; or
 - d. items which could affect health and safety.
2. The Committee may contact parties that are potentially affected by an item (e.g., trade associations, industry, and consumer groups) for comments. The Committee may consider these comments and any other information in determining if the item should be included on its agenda.
3. When the Committee determines that it should consider an item as a “priority” (using the criteria in 1.), the item will be handled in the following manner:
 - a. A “priority” item received prior to the Interim Meeting may be added to the Interim Meeting agenda by a majority vote of the Committee.
 - b. A “priority” item received after the Interim Meeting may be added to the Committee’s Annual Meeting agenda as:
 - 1) a discussion item by a majority vote of the Committee; or

- 2) as a voting item by a majority vote of the Committee and the NCWM Board of Directors.

I. Committee Agenda

1. The Committee will review items that have been submitted and selected by a majority vote to be included on its agenda. The Committee will only include those items that have been:
 - a. approved by at least one of the regional associations; or
 - b. forwarded by other committees, subcommittees, NTETC Sectors, task forces, or work groups, or those items that meet the criteria in Section H, Exceptions to Policy.
2. The Committee will publish an agenda (NCWM Publication 15) that identifies the items to be discussed during the Interim Meeting. This agenda will be distributed to members approximately 30 days prior to the meeting. The agenda will be provided upon request to all other interested parties.

(Amended 1998)

J. Interim Meeting

1. The Committee shall hold public hearings at the Interim Meeting for the purpose of discussing and taking comments on all agenda items.
2. Upon request, the Committee will provide the opportunity for presentations by government officials, industry representatives, consumer groups, or other interested parties during the Interim Meeting. Requests to make presentations must be received by the Committee Chairman or Technical Advisor at least two weeks prior to the start of the meetings.

K. Interim Meeting Report

1. Items under consideration by the Committee, and about which the Committee offers comments or recommendations to NCWM to act upon during the Annual Meeting, will be included in the Committee's Interim Report published in the Annual Meeting Program and Committee Reports (NCWM Publication 16).
2. The Annual Meeting Program and Committee Reports will be prepared and distributed to Conference members approximately three months prior to the NCWM Annual Meeting.

L. Classifications for Agenda Items

At the Interim Meeting, the Committee can classify proposals in one of three ways as:

1. "Voting" – These are items the Committee believes are fully developed and ready for final consideration of the voting membership. Each item has either received majority support from the Committee or the Committee has reached agreement that it is ready for voting status to let NCWM membership decide. The Committee has the ability to remove items from the voting agenda at the Annual Meeting by changing the status prior to a vote of the NCWM membership. The Committee may amend voting items during the course of the Annual Meeting based on additional information received following the Interim Meeting and testimony received at the Annual Meeting. These items may also be amended by the voting membership during the voting session of the Annual Meeting following the procedures outlined in the NCWM Bylaws; or
2. "Informational" – These items are deemed by the Committee to have merit. They typically contain a proposal to address the issue at hand and a meaningful background discussion for the proposal. However, the Committee wants to allow more time for review by stakeholders and possibly further development to

address concerns. The Committee has taken the responsibility for any additional development of Informational items. For particularly difficult items, the Committee may assign the item to an existing Subcommittee under its charge or request that the NCWM Chair appoint a special task group that reports to the Committee. At the Annual Meeting, the Committee may change the status of the items, but not to Voting status because the item has not been published as such in advance of the meeting; or

3. “Developing” – These items are deemed by the Committee to have merit, but are found to be lacking enough information for full consideration. Typically the item will have a good explanation of the issue, but a clear proposal has yet to be developed. By assigning Developing status, the Committee has sent the item back to the source or assigned it to some other entity outside the scope of the Committee with the responsibility of further development. The Committee Report will provide the source with clear indication of what is necessary to move the item forward for full consideration. The item will be carried in the Committee agenda in bulletin board fashion with contact information for the person or organization that is responsible for the development. Since the Committee is not required to receive testimony on developing items, this status should be carefully implemented so as not to weaken the standards development process; or
4. “Withdrawn” – These are items that the Committee has found to be without merit. The Committee's determination to withdraw should not be based on the Committee's opinion alone, but on the input received from stakeholders. The Committee's report will contain an explanation for the withdrawal of the item. Once an item appears in NCWM Publication 16 as Withdrawn, the status of that item may not be amended. The item may be reintroduced through the regional associations for consideration as a new item.

(Amended 2013)

M. Comments on Interim Reports

1. Weights and measures officials, industry representatives, and all others are encouraged to submit written comments on items in the Committee's Interim Report.
2. All comments on the Interim Meeting Report must be submitted to the Committee with a copy to the Executive Secretary no later than one month preceding the opening of the Annual Meeting.

N. Annual Meeting

1. The Committee will hold a public hearing at the Annual Meeting to discuss items on its agenda.
2. Those who want to speak on an item during the public hearing should request time from the Committee Chairman. The Committee Chairman may impose time limits on presentations, the discussion of a question, or the discussion of a proposed amendment.

O. Final Committee Reports and Conference Action

1. Following the public hearings, the Committee will prepare its final report for action by the voting membership of the Conference. Copies of the final report will be provided to the membership prior to the voting session for that report.
2. The Chairman of the Committee will present the final report of the Committee to the Conference body. A vote will be taken on items, proposals, or sections in the report as circumstances require. The Conference will vote on the entire final report as presented in accordance with established Conference voting procedures. Parliamentary procedures according to Robert's Rules of Order, as amended by NCWM Bylaws, must be adhered to in the presentation of, and any action on, a Standing Committee report.

(Amended 1998)

P. Revisions to the Handbook

NIST may not publish a new edition if it determines that it is reasonable to forego an annual publication (e.g., amendments were minor or editorial in nature) to save printing, mailing, and other costs. If this occurs, NIST will issue a notice that the current edition is still valid and will explain its action. (**Note:** Section numbering may be changed from one edition of the handbook to another to accommodate additions or deletions.) (Amended 2008)

Q. Annotation

Beginning in 1971, amendments or additions to sections in the Uniform Laws and Regulations are delineated at the end of each section (e.g., “amended 1982”) as a service to those states that are planning to update their own laws or regulations. The references to each revision and the year will enable legislators and rule makers to study the actual wording and rationale for changes (appearing in the Annual Report of NCWM for that year) and subsequently adopt changes in their own laws and regulations, modeling them after the Uniform Laws and Regulations.

R. Effective Enforcement Dates of Regulations

Unless otherwise specified, the new or amended regulations listed in this section are intended to become effective and subject to enforcement on January 1 of the year following adoption by NCWM.

1. Uniform Packaging and Labeling Regulation
2. Uniform Regulation for the Method of Sale of Commodities
3. Uniform Unit Pricing Regulation
4. Uniform Regulation for the Voluntary Registration of Servicepersons and Service Agencies for Commercial Weighing and Measuring Devices
5. Uniform Open Dating Regulation
6. Uniform Regulation for National Type Evaluation
7. Uniform Regulation for Engine Fuels, Petroleum Products, and Automotive Lubricants

(Added 1992)

S. Section References

In most references made to specific sections or subsections in this handbook, the word “Section” is used, followed by the section number.

T. The International System of Units

The “International System of Units,” “SI,” or “SI Units” means the modernized metric system as established in 1960 by the General Conference on Weights and Measures (GIPM). In 1988, Congress amended the Metric Conversion Act of 1975 (see Section 5164 of Public Law 100-418) to declare that it is the policy of the United States to designate the metric system of measurement as the preferred measurement system for U.S. trade and commerce, and it further defined “the metric system of measurement” to be the International System as established by the GIPM and as interpreted or modified for the United States by the Secretary of Commerce. [See Metric Conversion Law 15 U.S.C. 205, NIST Special Publication 330 – The International System of Units (SI); NIST Special Publication 814 – Metric System of Measurement; and, Interpretation of the International System of Units for the United States in Federal Register of May 16, 2008, (“Federal Register” Vol. 73, No. 96) or subsequent revisions]. In

1992, Congress amended the Federal Fair Packaging and Labeling Act to require certain consumer commodities to include the appropriate SI units along with the customary inch-pound units in their quantity statements.

(Added 1993) (Revised 2008)

U. “Mass” and “Weight.” [NOTE 1, page 7]

The mass of an object is a measure of the object’s inertial property, or the amount of matter it contains. The weight of an object is a measure of the force exerted on the object by gravity, or the force needed to support it. The pull of gravity on the earth gives an object a downward acceleration of about 9.8 m/s^2 . In trade and commerce and everyday use, the term “weight” is often used as a synonym for “mass.” The “net mass” or “net weight” declared on a label indicates that the package contains a specific amount of commodity exclusive of wrapping materials. The use of the term “mass” is predominant throughout the world, and is becoming increasingly common in the United States.

(Added 1993)

V. Use of the Terms “Mass” and “Weight.” [NOTE 1, page 7]

When used in this handbook, the term “weight” means “mass.” The term “weight” appears when inch-pound units are cited, or when both inch-pound and SI units are included in a requirement. The terms “mass” or “masses” are used when only SI units are cited in a requirement. The following note appears where the term “weight” is first used in a law or regulation.

NOTE 1: When used in this law (or regulation), the term “weight” means “mass.” (See paragraphs U. “Mass” and Weight and V. Use of the Terms “Mass” and “Weight” in Section I. Introduction of NIST Handbook 130 for an explanation of these terms.)

(Added 1993)



Form 15: Proposal to Amend Handbooks

| General Information (See Instructions) | | | |
|---|--|--|----------------------------|
| 1. Date: | 2. Regional Association(s): ___ Central (CWMA) ___ Northeastern (NEWMA) ___ Southern (SWMA) ___ Western (WWMA) | 3. Standing Committee: ___ L&R ___ S&T ___ PDC | |
| 4. Submitter Name: | | | |
| 5. Street Address: | | | |
| 6. City: | | 7. State: | 8. Zip Code: |
| 10. Phone Number: | | 11. Fax Number: | 12. E-mail Address: |
| Proposal Information (See Instructions) | | | |
| 13. Purpose: | | | |
| 14. Handbook to be Amended: ___ <i>NIST Handbook 44</i> ___ <i>NIST Handbook 130</i> ___ <i>NIST Handbook 133</i> Section: Paragraph: | | | |
| 15. Proposal: | | | |
| 16. Justification: | | | |
| 17. Other Contacts: | | | |
| 18. Other Reasons For: | | | |
| 19. Other Reasons Against: | | | |
| 20. Evidence: | | | |
| 21. Additional Considerations: | | | |
| 22. Suggested Action: ___ Recommend NCWM Adoption ___ Developing Item ___ Informational Item ___ Other (Please Describe): | | | |
| 23. List of Attachments: | | | |
| For Regional Use Only | | | |
| Comments: | | | |

Submit Form Via Email to don.onwiler@ncwm.net:
 1135 M Street, Suite 110 / Lincoln, Nebraska 68508
 P. 402.434.4880 F. 402.434.4878 E. info@ncwm.net W. www.ncwm.net

Revised: February 2011

2.25. Baler Twine. – Baler twine shall be sold on the basis of length in meters or feet, and net mass or weight by kilograms or pounds.

(Added 1992)

2.26. Potpourri. – Potpourri shall be sold as follows:

- (a) Potpourri packaged in advance of sale shall be sold by weight, except when sold in a decorative container or sachet, which may be sold by count.
- (b) Potpourri sold from bulk shall be sold by weight or by dry volume.

(Added 1992)

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

2.27.1. Definitions.

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

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

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

2.27.2. Method of Retail Sale and Dispenser Labeling.

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

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

2.28. Communication Paper.

2.28.1. Definitions.

2.28.1.1. Communication Paper. – Packaged bond, mimeo, spirit duplicator, xerographic, and other papers, including cut-sized office paper and computer paper.

2.28.1.2. Basis Weight. – As used in this regulation for labeling means the grade, category, or identity of the paper determined according to the latest version of ASTM Standard Method D646, “Grammage of Paper and Paperboard.” Basis weight is used as a standard of identity and is not considered a net weight declaration.

2.28.2. Method of Retail Sale and Labeling.

2.28.2.1. Method of Retail Sale. – All packaged communication paper kept, offered, or exposed for sale and sold at retail shall be sold in terms of sheet length and width and count.