DEPARTMENT OF COMMERCE

National Institute of Standards and Technology

National Conference on Weights and Measures Annual and Interim Meeting

AGENCY: National Institute of Standards and Technology, Commerce.

ACTION: Notice.

SUMMARY: The combined 105th Annual and 2021 Interim Meeting of the National Conference on Weights and Measures (NCWM) will be held using a virtual meeting platform and in-person at the Sirata Beach Hotel & Conference Center, St. Pete Beach, Florida, from Sunday, January 10, 2021, through Friday, January 15, 2021. This notice contains information about significant items on the NCWM Committee agendas but does not include all agenda items. As a result, the items are not consecutively numbered.

DATES: The 105th Annual Meeting will be held from Sunday, January 10, 2021, through Tuesday, January 12, 2021. The 2021 Interim Meeting will follow on Wednesday, January 13, 2021 through Friday, January 15, 2021. The meeting schedule will be available on the NCWM website at www.ncwm.com.

ADDRESSES: This meeting will be held using a virtual meeting platform and in-person at the Sirata Beach Hotel & Conference Center, St. Pete Beach, Florida.

FOR FURTHER INFORMATION CONTACT: Dr. Douglas Olson, NIST, Office of Weights and Measures, 100 Bureau Drive, Stop 2600, Gaithersburg, MD 20899-2600. You may also contact Dr. Olson at (301) 975-2956 or by e-mail at douglas.olson@nist.gov. The meeting is open to the public, but a paid registration is required. Please see the NCWM website (www.ncwm.net) to view the meeting agendas, registration forms, and hotel reservation information.

SUPPLEMENTARY INFORMATION: Publication of this notice on the NCWM's behalf is undertaken as a public service and does not itself constitute an endorsement by the National
The National Conference on Weights and Measures (NCWM) is an organization of weights and measures officials of the states, counties, and cities of the United States, and representatives from the private sector and federal regulatory agencies. These meetings can bring these government officials together with representatives of business, industry, trade associations, and consumer organizations to discuss proposed laws and regulations and other subjects related to the field of weights and measures technology, administration, and enforcement. NIST hosted the first meeting of the NCWM in 1905. Since then, the conference has provided a model of cooperation between Federal, State and local governments and the private sector. NIST participates to encourage cooperation between federal agencies and the states in the development of legal metrology requirements. NIST also promotes uniformity in state laws, regulations, and testing procedures used in the regulatory control of commercial weighing and measuring devices, packaged goods, and for other trade and commerce issues.

The NCWM has established multiple committees, task groups, and other working bodies to address legal metrology issues of interest to regulatory officials, industry, consumers, and others. The following are brief descriptions of some of the significant agenda items that will be considered by some of the NCWM Committees at the NCWM Annual and Interim Meetings. Comments will be taken on these and other issues during several public comment sessions. At this stage, the items are proposals.
This meeting also includes work sessions in which the Committees may also accept comments, and where recommendations will be developed for consideration and possible adoption at the NCWM 2020 (105th Annual Meeting) and NCWM 2021 Annual Meeting. The Committees may withdraw or carryover items that need additional development.

These notices are intended to make interested parties aware of these development projects and to make them aware that reports on the status of the project will be given at the Interim Meeting. The notices are also presented to invite the participation of manufacturers, experts, consumers, users, and others who may be interested in these efforts.

The Specifications and Tolerances Committee (S&T Committee) will consider proposed amendments to NIST Handbook 44, “Specifications, Tolerances, and other Technical Requirements for Weighing and Measuring Devices” (NIST HB 44). Those items address weighing and measuring devices used in commercial applications, that is, devices that are used to buy from or sell to the public or used for determining the quantity of products or services sold among businesses. Issues on the agenda of the NCWM Laws and Regulations Committee (L&R Committee) relate to proposals to amend NIST Handbook 130, “Uniform Laws and Regulations in the Areas of Legal Metrology and Fuel Quality” (NIST HB 130) and NIST Handbook 133, “Checking the Net Contents of Packaged Goods” (NIST HB 133).

**NCWM S&T Committee (S&T 105th Annual and Interim Meeting)**

The following items are proposals to amend NIST HB 44:

**GEN - General Code**

   Item GEN-21.1  Use-for-Fee Vehicle and Axle-Load Scales

   The S&T Committee will consider a new proposal submitted as a recommended Developing Item. This proposal seeks to develop changes to NIST HB 44’s General Code and/or Scales
Code that will clarify if charging a fee for conducting a weighing operation on a scale constitutes commercial use of the device regardless of whether or not the weight obtained from that weighing operation is used in a commercial transaction. If this is determined to constitute commercial use, then it is hoped the following questions can be answered through the development process of this proposal:

1. Is it permissible to use a vehicle scale to determine the axle load(s), axle-group load(s), and total weight of a vehicle when the length of that vehicle exceeds the length of the scale’s load-receiving element and must therefore be weighed in multiple drafts?
2. Is it permissible to use an axle-load scale to determine total vehicle weight (often referred to as “gross vehicle weight”) by weighing the different axles and axle groups individually and then summing them, when the only use of the total vehicle weight is for non-commercial purposes, e.g., to verify compliance with state and federal highway legal load limits?
3. What is an appropriate format for the recording of values corresponding to a vehicle’s axle and axle-group loads and total vehicle weight?

An important consideration in answering question 1 is the different approach requirements specified in NIST HB 44 for vehicle scales versus axle-load scales and the reasons for those requirements.

The submitter is soliciting input from stakeholders that will help resolve any questions or confusion associated with this item.

SCL - Scales Code

Item SCL-20.10 S.1.2.2.2. Class I and II Scales Used in Direct Sale and S.1.2.2.3. Deactivation of a “d” Resolution.
The S&T Committee will consider a proposal to eliminate two current specification requirements in the Scales Code of NIST HB 44. This proposal recommends the deletion of paragraph S.1.2.2.2. “Class I and II Scales Used in Direct Sales” which requires the verifications scale division (e) and scale division (d) to be equal on Class I and II scales used in a direct sale application for scales installed as of January 1, 2020. This requirement would become enforceable to all Class I and II scales used in a direct sale application on January 1, 2023. A direct sale application is one in which both parties in the transaction are present when the quantity is being determined. The second requirement proposed for deletion is paragraph S.1.2.2.3. “Deactivation of a “d” Resolution” which prohibits the simple deactivation of the “d” resolution when the values of “e” and “d” are different on a Class I or II scale if such action affects the scale’s ability to round digital values to the nearest minimum unit that can be indicated or recorded. When these two scale increments (identified as “e” and “d”) are different, two different levels of the scale’s resolution are established. The variation in scale divisions within a scale’s capacity range will produce either a lesser, or a greater resolution in the representation of values for loads applied to the scale. According to NIST HB 44, when these division values aren’t equal on Class II scales, the value of “e” is required to be larger than the value of “d.”

Item SCL-17.1 S.1.8.5. Recorded Representations, Point of Sale Systems, Appendix D – Definitions: tare

The S&T Committee will consider a proposal requiring additional sales information to be recorded by cash registers interfaced with a weighing element for items that are weighed at a checkout stand. These systems are currently required to record the net weight, unit price, total price, and the product class, or in a system equipped with price look-up capability, the product name or code number. The change proposed would add “tare weight” to the sales information currently required. Additional changes to this proposal made recently by the
NCWM S&T Committee established a new enforcement date of January 1, 2024 for the proposed requirement. The Committee also added a footnote that had been omitted in a previous version. If the proposal is adopted, the additional information (i.e., the tare weight) would be required to appear on the sales receipt for items weighed at a checkout stand (Point of Sale Systems) on equipment installed in commercial service as of January 1, 2024. This proposed change would not affect equipment already in service.

SCL-20.13 N.1.5. Discrimination Test.

The S&T Committee will consider a proposal that provides an exemption to conducting a discrimination test on digital electronic scales of Accuracy Class I and II in which the verification scale division (e) equals the displayed scale division (d) and is less than 5 mg. The proposal calls into question the practicality of conducting a discrimination test on such scales citing the need for excessively small denominations of test weights (i.e., decimal milligrams) and questioning whether the test can be successfully conducted in an environment where conditions are not strictly controlled.

Item SCL-16.1

Sections Throughout the Code to Include Provisions for Commercial Weigh-In-Motion (WIM) Vehicle Scale Systems

The S&T Committee will consider a proposal to amend various sections of the Scales Code of NIST HB 44 to address WIM vehicle scale systems used for commercial applications. This “carry-over” item has appeared on the S&T Committee’s agenda since 2016. An NCWM Task Group (TG) was formed in 2016 at the request of the S&T Committee to consider a proposal that would have expanded the NIST HB 44, Weigh-In-Motion Systems Used for Vehicle Enforcement Screening – Tentative Code to also apply to legal-for-trade (commercial) and law enforcement applications. Members of the TG later agreed that commercial application of WIM
vehicle scale systems should be addressed by the Scales Code of NIST HB 44, rather than the Weigh-In-Motion Systems Used for Vehicle Enforcement Screening – Tentative Code.

Members of the TG agreed in 2016 to eliminate from the proposal any mention of a law enforcement application and focus solely on WIM vehicle scale systems intended for use in commercial applications. The TG is made up of representatives of WIM equipment manufacturers, NIST Office of Weights and Measures, NCWM, state weights and measures agencies, and others. The most recent activity by the TG has focused on obtaining evidence supporting the claims of WIM scale manufacturers regarding the performance capabilities of these devices. The TG has requested this evidence to indicate whether devices being manufactured at this time can comply with commercial device tolerances applied to comparable static-weighing devices. The submitter of this proposal (a WIM manufacturer) has initiated a process where preliminary testing can be done to provide the TG with data to substantiate the claims regarding device performance.

An additional focus of the TG, since its formation in 2016, has been to concentrate on the development of appropriate official test procedures used to verify the accuracy of a WIM vehicle scale system. Important factors in this discussion have been that a variety of axle and tandem axle configurations on vehicles will typically be weighed by a WIM system and that a proposed tolerance of 0.2 percent on gross (total) vehicle weight would be applied as maintenance tolerance. The TG provided an update on its development of this item at the 2019 NCWM Interim Meeting. Mr. Tim Chesser (Arkansas), (and co-chair of the WIM TG), recommended the S&T Committee assign the item, returning it to the TG. The Committee agreed to recommend the item be assigned to the TG.

Item SCL-20.12.

Multiple Sections to Add Vehicle Weigh-in-Motion to the Code and Appendix D – Definitions; vehicle scale and weigh-in-motion vehicle scale.
The S&T Committee will consider a proposal that would amend multiple sections in NIST HB 44 Scales Code so that they could be applied to WIM vehicle scales. This proposal is similar to Item SCL-16.1. that also appears on the agenda, however, this proposal would only permit commercial weights from WIM equipment when the vehicles are weighed in a single draft and would not permit the summing of axle loads or axle-group loads to determine a gross (total) vehicle weight. The submitter of this proposal provided an opportunity for several state regulatory officials, as well as technical staff from NCWM and NIST Office of Weights and Measures to witness testing performed on a single-draft weigh-in-motion (WIM) vehicle scale. That demonstration provided evidence that this type of system may be capable of complying with current NIST HB 44 Class III L tolerances.


Definitions: point-based railroad weighing systems.

This proposal to amend the Scales Code of NIST HB 44 to permit use of “point-based” in-motion railroad weighing systems in commercial applications replaces one from the same submitter that appeared on the Committee’s agenda in 2018. This proposal is intended to serve the same purpose as the earlier proposal, however, many of the changes in the previous version have been deleted. The proposal under current consideration by the S&T Committee includes only the following two recommended changes to NIST HB 44:

- Add a new subpart (b) to existing Scales Code paragraph UR.5. Coupled-in-Motion Railroad Weighing Systems that requires the user of dynamic weighing systems for railway cars to provide a static-weighing scale deemed suitable by the statutory authority for use as a reference scale when testing the coupled-in-motion railroad scale.
- Add a new definition for “point-based railroad weighing systems” in Appendix D – Definitions.
The S&T Committee will consider a proposal to replace the term “tare” with a more accurate descriptive term “dimensional offset” throughout the NIST HB 44 Multiple Dimension Measuring Devices Code. A new definition for the term “dimensional offset” is also proposed for addition to NIST HB 44 Appendix D - Definitions. The submitter of this proposal (The NTEP Multiple Dimension Measuring Device Work Group) prefers the use of “dimensional offset” since the term “tare” implies that a specific (measured/weighed) value is subtracted from a total measured value to arrive at a net value. Exclusion of the conveyance material (e.g., pallet, skid, etc.) containing an object to be measured by a multiple dimension measuring device is not a subtractive function of the device and the term “dimensional offset” is a more accurate descriptive term to use.

LMD – Liquid Measuring Devices

Block 4 Items Electronically Captured Tickets or Receipts

The S&T Committee will consider a proposal to amend NIST HB 44 General Code (Section 1.10.) paragraph G-S.5.6. Recorded Representations and numerous additional paragraphs throughout the Liquid-Measuring Devices Code (Section 3.30.), Vehicle-Tank Meters Code (Section 3.31.), LPG and Anhydrous Ammonia Liquid-Measuring Devices Code (Section 3.32.), Cryogenic Liquid-Measuring Devices Code (Section 3.34.), Mass Flow Meters Code (Section 3.37.), Carbon Dioxide Liquid-Measuring Devices Code (Section 3.38.), and the Hydrogen Gas-Measuring Devices Code (Section 3.39.) to allow recorded values to be captured electronically as an option to receive either a printed ticket or printed receipt.
Changes to the definitions of “recorded representation” and “recording element” in Appendix D of NIST HB 44 are also proposed.

Block 5 Items Category 3 Method of Sealing

The S&T Committee will consider proposals to permit the use of an electronic log in lieu of a printed copy of a Category 3 sealing method on liquid measuring devices. The current “Category 3” sealing requirements in NIST HB 44 Liquid-Measuring Devices Code (Section 3.30.) specify that a printed copy of an event logger must be available on demand through the device or through another on-site device and that the information may also be available electronically. The new proposal would amend the language in Table S.2.2. “Categories of Device and Methods of Sealing” of the Liquid-Measuring Devices Code (Section 3.30.) to permit either a printed or electronic form of the event logger to be made available.

VTM – Vehicle Tank Meters


The S&T Committee will again consider this carry-over item that proposes to provide specifications and user requirements for manifold flush systems designed to eliminate product contamination on VTMs used for multiple products. This proposal would add specifications on the design of VTMs under S.3.1.1. “Means for Clearing the Discharge Hose.” and add a new user requirement UR.2.6. “Clearing the Discharge Hose.” During open hearings of previous NCWM meetings, comments were heard about the design of any system to clear the discharge hose of a product prior to the delivery of a subsequent product which could provide opportunities to fraudulently use this type of system.

EVF – Electric Vehicle Fueling Systems
S.1.3.2. EVSE Value of the Smallest Unit.

The S&T Committee will consider a proposal that would specify the maximum value of the indicated and/or recorded electrical energy unit used in an EVSE (Electric Vehicle Supply Equipment). This proposal would reduce (by a factor of 10) the current specified values of these units. The current maximum values of 0.005 MJ and 0.001 kWh would be changed to 0.0005 MJ and 0.0001 kWh respectively. The submitters contend that testing of these systems would be expedited through these changes and reduce the amount of time necessary to complete official tests.

GMA – Grain Moisture Meters 5.56. (A)

GMA-19.1 Table T.2.1. Acceptance and Maintenance Tolerances Air Oven Method for All Grains and Oil Seeds.

The S&T Committee will consider a proposal that would reduce the tolerances for the air oven reference method. The proposed new tolerances would apply to all types of grains and oil seeds. This item is a carry-over proposal from 2019 and would replace the contents of Table T.2.1. with new criteria. Additional inspection data will be collected and reviewed to assess whether or not the proposed change to the tolerances are appropriate.

GMA-20.1 S.2.5 Provision for Sealing

The S&T Committee will consider a proposal to correct an error caused by a 2019 amendment to the sealing requirements for grain moisture meters in Section 5.56.(a) of the Grain Moisture Meters Code. The proposal retains the sealing table in the 2018 version of the Code and adds a new paragraph S.2.5.1., which addresses the sealing requirements for grain moisture meters manufactured as of January 1, 2020.
The S&T Committee will consider changes included in this block affecting the NIST HB 44 Taximeters Code (Section 5.54.) and the Transportation Network Measurement Systems (TNMS) Code (Section 5.60.) that would amend the value of tolerances allowed for distance tests. The changes proposed in this item would change the Taximeters Code requirement T.1.1. “On Distance Tests” by increasing that tolerance to 2.5 % when the test exceeds one mile. The change to the TNMS Code affects requirement T.1.1. “Distance Tests” by reducing the tolerance allowed on overregistration under T.1.1.(a) from the current 2.5 % to 1 % when the test does not exceed one mile and would increase the tolerance for underregistration in T.1.1.(b) from 2.5 % to 4 %. These changes if adopted would align the tolerances values for distance tests allowed for taximeters and TNMS.

NCWM L&R Committee

Issues on the 105th Annual agenda of the NCWM Laws and Regulations Committee (L&R Committee) relate to proposals to amend NIST HB 130.

The following items are proposals to consider amending NIST HB 130:

Item MOS-20.3 – NIST HB 130, Uniform Method of Sale, Diesel Fuel. The L&R Committee will consider a proposal to add similar language for diesel fuel that is currently within the Uniform Fuels and Automotive Lubricants Regulations. There are some states that may only adopt one of the regulations that are within NIST HB 130.

Item Block B3: FLL-18.1 – NIST HB 130, Uniform Fuels and Automotive Lubricants Inspection Law, Section 8. Prohibited Acts, MOS 18.1. Uniform Method of Sale of Commodities Regulation, Section 2.33 Oil, and FLR-18.1. Uniform Fuels and Lubricants Automotive Lubricants Regulation, Section 2.14. Engine (Motor) Oil, 3.13. Oil and 7.2. Reproducibility. This proposal is to amend various regulations within NIST HB 130 to provide modifications to existing regulations to protect consumers from purchasing obsolete motor oils that can harm modern engines.

Item FLR-20.5 –NIST HB 130, Uniform Fuels and Automotive Lubricants, Section 2.1.2.(a). Gasoline-Ethanol Blends. This proposal would modify the existing handbook regulation to add the language, “containing at least 9 and not more than 15 volume percent ethanol.” This language aligns with EPA 40 CFR 80.27(d).

Issues on the 2021 Interim agenda of the NCWM Laws and Regulations Committee (L&R Committee) relate to proposals to amend NIST HB 130 and NIST HB 133.

The following items are proposals for modifying NIST HB 130 and NIST HB 133:

Item Block (B1).– HB 130, PAL-19.1. UPLR, Sec. 2.8. Multiunit Package. NET-19.2. NIST HB 133, Modify “scope” for Chapters 2 thru 4, add a note following Sections 2.3.7.1. and 2.7.3., NET-19.3., and create a Chapter 5. Specialized Test Procedures in NIST HB 133. The L&R Committee will also be addressing a proposal to include adoption of a test procedure for the total quantity declaration on multiunit or variety packages. In addition, in NIST HB 130, Uniform Packaging and Labeling Regulation, the proposal would clarify Section 2.8. Multiunit.

The following items are proposals for modifying NIST HB 130 Uniform Method of Sale (MOS) and the Uniform Fuels and Automotive Lubricants Regulation (FLR):

Item Block (B4) – The Fuels and Lubricants Subcommittee will consider modifications to the MOS Regulation, Section 2.20.2. Documentation for Dispenser Labeling Purposes and the FLR Regulation for Section 1.23. Ethanol Flex Fuel, 2.1.2.(b) Gasoline-Ethanol Blends and Section
3.2.4. Documentation for Dispenser Labeling Purposes. This proposal will align the regulations with the U.S. EPA’s rule that grants a 1-psi vapor pressure waiver to E-15 for summertime.

Item Block (B6) – The L&R Committee will consider a language modification to NIST HB 130, MOS Regulation, Section 2.36.2. and FLR Regulation Section 3.14.1. Labeling and Identification of Transmission Fluid. This proposal would add language that provides a cautionary statement on the labels of packaged obsolete transmission fluids.

FLR-21.1. Section 4.4. Product Storage and Dispenser Identification – The L&R Committee will consider a proposal to add language for identification of dispenser supply piping or meters to be marked and labeled in accordance with API Recommended Practice 1637 Using the API Color-Symbol System to Identify Equipment, Vehicles, and Transfer Points for Petroleum Fuels and Related Products at Dispensing and Storage Facilities and Distribution Terminals.

Kevin Kimball,
Chief of Staff.

[FR Doc. 2020-26480 Filed: 11/30/2020 8:45 am; Publication Date: 12/1/2020]