OWM Technical Analysis

NIST | OFFICE OF WEIGHTS AND MEASURES

Specifications and Tolerances (S&T) Committee Agenda Items:

Executive Summary

In preparation for the 2026 Interim Meeting of the National Council on Weights and Measures (NCWM) on January 11-14, 2026

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Executive Summaries from NIST Office of Weights and Measures (OWM) Analysis Specifications and Tolerances (S&T) Committee 2026 NCWM Interim Meeting Agenda

Due to a lapse in appropriations, the U.S. Government was shut down from October 1, 2025, to November 12, 2025. Subsequently, NIST OWM was unable to provide a complete review and analysis for some of the items on the 2026 NCWM Interim Meeting agenda.

For those agenda items that did not receive a full technical analysis and review by OWM, we have provided updated information on regional recommendations and comments from their meetings, for your convenience. OWM will continue to research and review all items for the 2026 NCWM Annual in July.

The NIST OWM Executive Summary Report is submitted to assist the Weights and Measures community as it deliberates on items before the Council. NIST OWM offers these comments and recommendations based on information and input available as of the date of this report. This does not address information received after this date.

Language shown in a boldface print by **~~striking out~~** information to be deleted and **<u>underlining</u>** information to be added. Requirements that are proposed to be nonretroactive are printed in ***boldface italics***.

Assessment of items contained within this report is as of November 17, 2025 and does not address information received after this date.

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Subject Series List for the Specifications and Tolerances Committee

Handbook 44 – General Code ..... GEN Series

- Scales ..... SCL Series
- Belt-Conveyor Scale Systems ..... BCS Series
- Automatic Bulk Weighing Systems ..... ABW Series
- Weights ..... WTS Series
- Automatic Weighing Systems ..... AWS Series
- Weigh-In-Motion Systems used for Vehicle Enforcement Screening ..... WIM Series
- Liquid-Measuring Devices ..... LMD Series
- Vehicle-Tank Meters ..... VTM Series
- Liquefied Petroleum Gas and Anhydrous Ammonia Liquid-Measuring Devices ..... LPG Series
- Hydrocarbon Gas Vapor-Measuring Devices ..... HGV Series
- Cryogenic Liquid-Measuring Devices ..... CLM Series
- Milk Meters ..... MLK Series
- Water Meters ..... WTR Series
- Mass Flow Meters ..... MFM Series
- Carbon Dioxide Liquid-Measuring Devices ..... CDL Series
- Hydrogen Gas-Metering Devices ..... HGM Series
- Electric Vehicle Refueling Systems ..... EVF Series
- Vehicle Tanks Used as Measures ..... VTU Series
- Liquid Measures ..... LQM Series
- Farm Milk Tanks ..... FMT Series
- Measure-Containers ..... MRC Series
- Graduates ..... GDT Series
- Dry Measures ..... DRY Series
- Berry Baskets and Boxes ..... BBB Series
- Fabric-Measuring Devices ..... FAB Series
- Wire-and Cordage-Measuring Devices ..... WAC Series
- Linear Measures ..... LIN Series
- Odometers ..... ODO Series
- Taximeters ..... TXI Series
- Timing Devices ..... TIM Series
- Grain Moisture Meters (a) ..... GMA Series
- Grain Moisture Meters (b) ..... GMB Series
- Near-Infrared Grain Analyzers ..... NIR Series
- Multiple Dimension Measuring Devices ..... MDM Series
- Electronic Livestock, Meat, and Poultry Evaluation Systems and/or Devices ..... LVS Series
- Transportation Network Measuring Systems ..... TNS Series

Other Items ..... OTH Series

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GEN – GENERAL CODE

NIST OWM Executive Summary for GEN-26.1 – G-S.5.6. Recorded Representations and Appendix D – Definitions: electronic receipt

NIST OWM Recommendation: Developing

- OWM appreciates the work of the NTEP Committee to address this issue, but the definition proposed doesn't address many of the concerns brought forward with respect to all forms of recorded representations.

- The functional characteristics of a recorded representation must be addressed. The current definition of recorded representation is not complete because it does not include parameters for obtaining the information. OWM is suggesting amending this definition as shown here:

  recorded representation. – The printed, embossed, electronic, or other representation that is recorded as a quantity, unit price, total price, product identity, or other information required by a weighing or measuring device **that the consumer can obtain in a readily accessible form, which is unalterable and permanent to the extent desired by the consume**r. [1.10, 2.20, 2.21, 2.22, 2.24, 2.25, 3.30, 3.31, 3.32, 3.33, 3.34, 3.35, 3.36, 3.37, 3.38, 3.39, 5.54, 5.55, 5.56(a), 5.56(b), 5.57, 5.58, 5.60]

- With this addition, OWM would support this item.

SCL – SCALES

NIST OWM Executive Summary for SCL-22.2 – UR.3.1.X. Required Minimum for Cannabis Products

[1]**NIST OWM Recommendation:** No recommendation

- On November 21, 2025, NCWM added a supporting document under item SCL-22.2, which is an updated version of this item.
- NIST OWM has not conducted a detailed technical analysis of this revised proposal

[1] In contrast to hemp, marijuana remains a Schedule I substance under the Controlled Substances Act. NIST does not have a policy role related to the legalization of the production, sale, distribution, or use of cannabis (including hemp and marijuana). NIST participates in the National Council of Weights and Measures (NCWM) as part of NIST's statutory mission to promote uniformity in state laws, regulations, and testing procedures.

NIST OWM Executive Summary for SCL-24.2 – Multiple Sections Regarding Tare

NIST OWM Recommendation: No Recommendation

NIST OWM Executive Summary for SCL-25.1 – S.5.2. Parameters for Accuracy Class, S.6. Marking Requirements, and UR.3. User Requirements

NIST OWM Recommendation: Voting

- The original proposal consisted of 4 changes in the scales code:
  - Define the minimum capacity as a specification and move Table 8 to the specifications section.
  - Add the minimum capacity to the descriptive markings.
  - Make the minimum load a mandatory user requirement.
  - Clarify that the Minimum capacity is expressed in scale division, d.
- During previous meetings, many comments were heard on the original proposal. It was clear that it lacked enough support to pass all the proposed changes.
- Based on the comments heard during previous meetings, OWM decided to limit the proposal to clarifying that the recommended minimum load is expressed in scale division, d.
- Expressing the minimum load in scale divisions, d, is technically justified as it is a matter of display resolution, and not the tolerance or accuracy of the scale. OWM encourages the members to carefully read this justification in the detailed OWM analysis.
- This proposal brings the Scales Code in line with OIML R 76 regarding its relationship to the scale division.
- OWM believes that the item has been fully vetted and supports a voting status.

NIST OWM Executive Summary for SCL-25.3 – UR.3.14. Zero-Balance Recorded Weight for Forklift Scales

NIST OWM Recommendation: Developing

NIST OWM acknowledges the challenges associated with reweighs in the transportation sector. However, OWM has some concerns about this proposal.

- This proposal only addresses one aspect of an accurate weighing process, starting at zero with no load.
- Adding a definition of forklift scales to the Handbook is undesirable.
  - As proposed, it would apply to pallet jacks, which OSHA classifies as a Class III forklift, and it is unclear if this was the submitter's intent.
  - It creates a new category of instruments whose only difference from other onboard weighing systems is that the zero-balance condition is recorded.
- Other types of scales don't record the zero-balance condition. The justification does not explain why this is a problem specific to forklift scales used in the transport sector but not for other types of scales or applications. A better understanding may lead to alternative solutions to the submitter's problem.
- The submitter should consider working with the NCWM Uniform Shipment Law Task Group to coordinate their efforts with this group.

LMD – LIQUID MEASURING DEVICES

NIST OWM Executive Summary for LMD-24.2 – N.4.1. Normal Tests

NIST OWM Recommendation: Voting

- OWM worked with the submitter to develop the current language, which has been vetted through each region and by other stakeholders such as the Meter Manufacturers Association. This item is fully developed and should be assigned a Voting status.

NIST OWM Executive Summary for LMD-26.1 – S.2. Measuring Elements, S.4. Marking Requirements, N.4. Testing Procedures, U.R.6. ~~Temperature~~ Volume Compensation and Correction Wholesale, and T.5. Density Correction Systems

NIST OWM Recommendation: Developing

- OWM recognizes that blending ethanol and petroleum products results in a greater volume of the blended product than the sum of the volume of the separate products when corrected to the reference temperature of 15 °C (60 °F).
- This phenomenon has been recognized for some time, as evidenced by a presentation given during the 2007 CWMA Annual Meeting by Ron Hayes (MO Retired).
- The question before the weights and measures community is how best to quantify this phenomenon. This item was submitted in response to an issue a state had with a wholesale device that currently utilizes a system that corrects for density/excess volume.
- If the weights and measures community determines that these proposed amendments have merit, the requirements should be retroactive to apply to all systems currently in use. Accordingly, the word "Nonretroactive" should be removed from each paragraph in which it appears.
- There are redundancies in the proposed language in S.2.9.1. For clarity, to be more concise, and to limit the application of the paragraph to gasoline ethanol blends, OWM has suggested edits. See specifics in the Detailed analysis.
- In S.2.9.2. the term "systems" should be added to the second instance of the use of the phrase "automatic density correction" so the phrase "automatic density correction systems" appears twice in the paragraph. See specifics in the Detailed analysis.
- In S.4.3.3., it is unclear why the phrase "for Changes in Product Composition" is included in the title, as other proposed paragraphs only refer to "Automatic Density Correction".
    - For consistency, the language should mirror S.4.3.2. to the extent possible.
    - In addition, if the density-corrected volumes must be properly identified, presumably by the term "net," there needs to be a way to differentiate between a net volume that is the result of temperature compensation and a net volume that is the result of density correction. For example, Net TC for a temperature-compensated volume and Net DC for a density-corrected volume. This would require additional changes to this paragraph and to S.4.3.2. See specifics in the Detailed analysis.
- In N.4.1.2., it's unclear what the phrase "corrected by a reference implementation" means. It's also unclear what conditions would change after the first test. This seems to be language borrowed from N.4.1.1. which requires a test with the compensating system deactivated, but there is no similar requirement in this paragraph. See specifics in the Detailed analysis.
- T.5. should be in upright roman type, identifying its retroactive status. It also includes the phrase "reference implementation" and the phrase "calculated net standard volume". It's unclear what these represent. In general, the application of the paragraph is unclear.

- Is this tolerance applied to one test run where the net and gross volumes are known and the gross volume is corrected using the "reference implementation" and these values are compared, or to one test run where only the "calculated net standard volume" is known and the "volume as determined in a reference implementation" is compared to that value?

- The language as presented in the proposal in UR.3.6.1.2. (a) is different than what is currently in NIST HB 44, but no changes are identified in the proposal.

- The language in sub-paragraph (b) and newly proposed sub-paragraph (c) of UR.3.6.1.2. should be consistent when referring to the wholesale device.
  - Part (b) refers to "an electronic wholesale device", while part (c) refers to "a wholesale system". It is also unclear what is meant by "excess volume" in (c) (1) and "net standard volume inclusive of the excess volume".
  - Does "excess volume" in (c) (1) mean the difference between the net volume when corrected/compensated to 15 °C (60 °F) or the difference between the gross volume and the net volume corrected for density?
  - Is "net standard volume" the gross volume corrected/compensated to 15 °C (60 °F)?
  - These terms are new to NIST HB 44 and need to be defined or used in conjunction with another paragraph that describes the relevant context.

- The phrase "industry accepted practices" is included in the body of UR.3.6.2.3. in reference to determining product density and is too vague and broad in meaning when describing a measurement process. The justification refers to API MPMS Ch 8, and ASTM also has standards for measuring density. This paragraph should refer to "recognized standards" in place of "industry accepted practices".

- The language in newly proposed paragraph UR.3.6.2.3. is inconsistent with language currently in UR.3.6.1.2. Both paragraphs address the information required on invoices and it should be clear that they are requiring, if not the same, very similar information. See specifics in the Detailed analysis.

- UR.3.6.2.3. also includes the terms "excess volume" in (4) and "net standard volume inclusive of the excess volume" in (5). As stated above, these terms are new to NIST HB 44 and need to be defined or used in conjunction with another paragraph that describes the relevant context.

HGV – HYDROCARBON GAS VAPOR-MEASURING DEVICES

NIST OWM Executive Summary for HGV-25.1 – S.1.1.4. Advancement of Indicating and Recording Elements., S.11.5. Proving Indicator., S.2.2. Provision for Sealing., S.4.3. Temperature Compensation., S.4.4. ~~Badge~~Identification., N.3. Test Drafts., N.4.1. Normal Tests., and Appendix D. Definitions register

NIST OWM Recommendation: Voting

- OWM has worked with the submitter to further develop this item, and this version reflects updates based on our collaboration.
- With corrected formatting, OWM supports a Voting status.

WTR – WATER METERS CODE

NIST OWM Executive Summary for WTR-26.2 – S.1.1.4. Advancement of Indicating and Recording Elements

NIST OWM Recommendation: Voting

- This amendment removes language that could lead to misinterpretation of this requirement.
- OWM supports a Voting status as this item is fully developed.

EVF – ELECTRIC VEHICLE FUELING SYSTEMS

NIST OWM Executive Summary for EVF-26.2 – Section 3.40 Electric Vehicle Fueling System A.2. Exemptions, S.1 Primary Indicating and Recording Element, S.1.2. EVSE Indication Elements, S.1.3.2 EVSE Values of Smallest Units, S.2.3. EVSE Provision for Power Loss, S.2.4.2. Equipment Capacity and Type of Voltage, S.2.4.4. Agreement Between Indications, S.2.5.1. Money-Value Divisions Digital, S.7 Totalizer for EVSE Systems, N.3.2. Type Evaluation of a DC EVSE

NIST OWM Recommendation: Developing

- NIST OWM is supportive of the intent of this item, "to add clarity, uniformity, and consistency" to Section 3.40.
- Due to the extent of the proposed changes, OWM supports a Developing status to allow for further consideration of the effects of these proposed amendments.
- Proposed amendments to A.2. (a) would bring devices owned and operated by a Public Utility under the jurisdiction of Weights and Measures officials, which may conflict with state laws or regulations.
  - This change may lead to further confusion and should be carefully considered.
- The removal of A.2. (b) may also have unintended consequences.
  - This sub-paragraph exempts devices that dispense electrical energy for "free" from compliance with this section.
  - NIST HB 44 requirements are intended to be applied to transactions that involve a commercial or law enforcement measurement. When there is no fee for EV fuel, there's no commercial transaction.
  - Most of these devices have no measuring element and would be made obsolete by the removal of A.2. (b).
  - This change must also be carefully considered, as it may have a significant impact on those who own or operate these devices.
- The proposed language in S.1.X, specifically the phrase "as part of the device," is vague and could be interpreted as requiring the primary indicating element to be included as a component of the EVSE system, as the term "device" is also interpreted as the combination of the components that are required to facilitate a transaction.
  - A vehicle scale is a weighing device, but typically the primary indicating element is a separate component from the weighing element.
- A VTM, which is a measuring device, typically has a meter and a separate primary indicating element.
- The proposed retroactive language in S.1.2. could make those EVSE that currently comply with this paragraph obsolete. OWM supports this change, but as a nonretroactive requirement, see suggested language in the Detailed Analysis.

- The proposed amendment to S.1.3.2., changing the number of decimal places for AC EVSE from four (0.0000 kWh) to three (0.000 kWh), will have an effect on measurement accuracy, see detailed analysis.

- The proposed changes to S.2.3.1, S.2.3.2, and S.2.3.3 are formatted in a way that makes it difficult to know what the intended effect will be.
  - In the 2025 version of NIST HB 44, each of these paragraphs is retroactive.
  - In this item, the titles are in italics, which is representative of a nonretroactive requirement, but the remaining language is in upright type, and there are no dates associated with the paragraphs.
  - Adopting these changes as retroactive would affect all EVSE, possibly causing them to be out of compliance

- OWM agrees that the language in S.2.4.2. could be improved, but we have several concerns with the proposed amendments
  - The phrase "and any app used to advertise, or activate, or both" is too broad and would apply to any application that is associated with an EVSE, such as an app that "advertises" the location of an EVSE, but isn't involved in the commercial transaction
  - Requiring the maximum rate of energy transfer possible and the maximum rate of energy transfer currently available to be displayed may result in providing less clarity and uniformity in the information consumers are provided.
  - See Detailed Analysis for alternatives to the proposed changes.

- The proposed amendments to S.2.4.4. are redundant as this paragraph and G-S.5.2.2. (a) both require agreement of all values in a system.

- OWN supports consistency between the values in S.1.3.2. and S.2.5.1.
  - We are concerned with the amendments proposed to S.1.3.2. and suggest amending S.2.5.1. with language in the Detailed Analysis.

- If the weights and measures community supports the changes proposed to S.7., the new requirement should be nonretroactive, see Detailed Analysis.

- OWM agrees that type evaluation requirements are most appropriately identified in NCWM Pub 14 or other type evaluation procedures (CTEP) and supports the removal of N.3.2. Type Evaluation Testing of a DC EVSE.
  - In the case of EVSE, there is no sector or work group that actively meets to update/amend the EVSE section of Pub 14.
  - The most qualified opinion on whether this proposed change is appropriate or necessary would be from the NTEP. OWM will defer to their opinion.

FMT – FARM MILK TANKS

NIST OWM Executive Summary for FMT-26.1 – S.1.4. General

NIST OWM Recommendation: Developing

- OWM is unsure if this proposal effectively addresses the issue identified by the submitter.
- To further develop this item, OWM suggests the submitter consider making the new language nonretroactive and also consider whether it may be appropriate to require the address of each location at which the tanks were gauged to be identified on the Volume Chart or some other paragraph, e.g., S.6. Identification.

NIST OWM Executive Summary for FMT-25.1 – UR.1. Installation

NIST OWM Recommendation: Developing

- The item under consideration was revised after the 2025 Interim meeting and includes this new language:

  "The means used shall be constructed of impervious material, maintained free of breaks, depressions, and surface peelings."

- OWM is unsure what this addition would require and is concerned it may introduce the opportunity for misinterpretation and reintroduces prescriptive means to achieve the stated purpose.

TIM – TIMING DEVICES

NIST OWM Executive Summary for TIM-26.1 – S.1.1.3. Value of Smallest Division

NIST OWM Recommendation: Voting

- This item clarifies that EVSE offering time-related services must have a unit of time not greater than 1 minute.
- Based on comments made during the regional meetings, OWM is proposing an updated version with simplified language. See Detailed Analysis.

MDM – MULTIPLE DIMENSION MEASURING DEVICES

NIST OWM Executive Summary for MDM-25.1 – Multiple Sections Regarding Adding Volumetric Measuring Devices to Section 5.58

NIST OWM Recommendation: Voting

- OWM worked with the Multiple Dimension Measuring Devices (MDMD) Volume Focus Group, the submitter of items MDM-25.1, MDM-25.2, and MDM-25.3, to identify areas of Section 5.58. that needed additional language to properly incorporate Volumetric Measuring Devices into this section.
- Draft language was provided to the NCWM S&T Committee on January 9, 2025, shortly before the 2025 NCWM Interim meeting.
- At the 2025 NCWM Interim Meeting, the NCWM S&T Committee combined MDM-25.1, MDM-25.2, and MDM-25.3 to create item MDM-25.1 and directed the submitter to work with OWM to further develop this draft language to have a fully developed item for voting consideration at the 2025 NCWM Annual Meeting.
- Prior to the 2025 NCWM Annual Meeting, the NTEP MDMD Work Group reviewed the updated MDM-25.1 in its entirety and supported it as amended, with one minor change to the title of S.1.6.3., adding "Volumetric Measuring Devices" after "Recorded Representations", signifying that this paragraph only applies to volumetric measuring devices.
- The NCWM S&T Committee incorporated this suggested edit into MDM-25.1 during their work session prior to the Voting session.
- The morning of the Voting Session, an error was identified in Table T.3.1. which resulted in the item being downgraded to Informational status. The NCWM S&T Committee corrected this error following the NCWM Annual Meeting.
- Each region had the opportunity to review this item, and while only one region recommended Voting status, the other regions didn't provide specific areas that needed further development.
- OWM believes this item is fully developed and supports a Voting Status.

NIST OWM Executive Summary for MDM-26.1 – S.1.5.2. Devices Capable of Measuring Irregularly Shaped Objects

NIST OWM Recommendation: Voting

- OWM believes this item is fully developed and supports a Voting Status.
- If MDM-25.1 is assigned a Voting status, the NCWM S&T Committee must have a plan to identify any changes that would need to be made to this item if that item is adopted.

NIST OWM Executive Summary for MDM-25.3 – T.3. Tolerance Values

NIST OWM Recommendation: Developing

- Items MDM-25.1, MDM-25.2, and MDM-25.3 cannot be evaluated and adopted separately. Therefore, NIST OWM suggests combining these three proposals into a single proposal, MDM-25.1.
- In order to include volume measurement devices, more requirements in Section 5.58 need revision than just A.2., N.1.1. and T.3.
- NIST OWM recommends a thorough investigation of the requirements that need amending as specified in the detalied anlaysis for item MDM-25.1, at a minimum.
- The proposed new paragraph T.3.1. specifies, “maintenance and acceptance tolerance shall be as shown in Table XX”. The new Table XX only specifies maintenance tolerances. This item needs further editing to provide clarity.
- OWM suggests removing the sentence “The maintenance and acceptance tolerance shall be as shown in Table XX” from T.3.1. For Volume Devices, as maintenance tolerances are specified in part (a) of T.3.1. and acceptance tolerances are specified in part (b) of T.3.1.

OTH – OTHER ITEMS

NIST OWM Executive Summary for OTH-25.1 – 2.26 Weigh-in-Motion Systems Used for Vehicle Direct Enforcement

NIST OWM Recommendation: Voting

- The submitters have demonstrated the need for direct and permanent enforcement, and that WIM installations are suitable and extremely effective.
- Regarding the installation in New York State:
  The number of violations has dropped by 60% during its first year of operation.
  - As of 4/4/2025, there had been no legal challenges regarding the accuracy of the WIM system.
  - The WIM installation has proven that WIM systems can be stable over a longer period, depending on the type of pavement.
  - The certification and inspections of the WIM have become part of the regular W&M program of the NYS Department of Agriculture and Markets. Many of these resources are provided by the owner of the WIM system, lifting the burden on the Bureau of Weights and Measures.
- The installation in New York is the first WIM in the US that is used in direct enforcement of weight limit on public roads. NIST OWM expects that, given the success of the pilot in NYC, these systems will also be installed in other places. This creates a need for a national standard to ensure a harmonized approach.
- The submitters have addressed the concerns expressed during meetings of the Council with respect to the failed item WIM-23.1 by:
  - Reducing the number of test runs during subsequent verifications, and
  - Introducing a class with tighter tolerances, which gives states more flexibility to implement WIM systems as they see fit.
- The proposed classification and tolerances are comparable with the WIM standards from ASTM and OIML.
- NIST OWM is of the opinion that item OTH-25.1 is fully vetted and supports a voting status.
- The changes provide additional clarification but are not significant in nature.
- NIST OWM is of the opinion that the updated item is fully vetted and supports a voting status.

NIST OWM Executive Summary for OTH-26.1 – Appendix D Definitions – interference test

NIST OWM Recommendation: Voting with suggested edits

- To facilitate interpretation, OWM suggests the following revision of the definition to replace the item under consideration:

  interference test. – A test intended to determine the proper operation of the measuring, indicating, and recording elements to automatically, accurately, clearly, and separately provide all required transaction information, as set forth in NIST Handbook 44 Sections 3.40. and 5.55., for an EVSE designed to assess time-based fees associated with the fees for the delivery of electrical energy (by the kilowatt-hour) to an EV. [5.55]

  (Added 20XX)

NIST OWM Executive Summary for OTH-26.2 – Appendix D Definitions – scale division, value of (d)

NIST OWM Recommendation: Voting with the below suggested edit

- Replace the term "division" with "interval, value of e" to have the correct reference to the definition of verification scale interval within the parentheses at the end of the definition, and add references to the correct sections of the handbook that include the term "scale division".

  scale division, value of (d). T~~**he value of the scale division, expressed in units of mass, is t**~~he smallest subdivision of the scale for **an** analog indication or the difference between two consecutively indicated or ~~**printed**~~**recorded** values for **a** digital indication or ~~**printing**~~**recorded representation, expressed in units of mass**. (Also see "verification scale ~~**division**~~**interval, value of (e)**") [2.20, **2.21,** 2.22**, 2.24**]

ITEM BLOCK 1 (B1) TRANSPORTATION-FOR-HIRE SYSTEMS

(Note: See information regarding TNS-25.1, which proposes to remove Section 5.60.)

NIST OWM Executive Summary for B1-TXI-25.1 – 5.54 Taximeters Transportation-For-Hire Systems

NIST OWM Recommendation: No Recommendation

ITEM BLOCK 2 (B2) REFERENCES TO TYPE EVALUATION

NIST OWM Executive Summary for B2: CDL-26.1 – ~~A.4. Type Evaluation~~, B2: HGV-26.1 – ~~A.4. Type Evaluation~~, B2: EVF-26.1 –A.4. Type Evaluation, B2: EMS-26.1 – A.4. Type Evaluation, and B2: GMA-26.1 – ~~A.4. Type Evaluation~~

NIST OWM Recommendation: Voting

- This item removes paragraphs that no longer serve their intended purpose.
- OWM consulted Jeff Gibson, NTEP Administrator and Darrell Flocken, Former NTEP Administrator, regarding this proposal. Neither Jeff nor Darrell had concerns with the proposed amendments in this block of items.
    - In the Item Under Consideration for GMA-26.1 in NCWM Pub 15, it should state, "Amend NIST Handbook 44 Section 5.56.(a) Grain Moisture Meters Code as follows". It currently references the NUEMS Code (Section 3.41).

ITEM BLOCK 3 (B3) METHOD OF SEALING, CATEGORY 3

NIST OWM Executive Summary for B3: LMD-26.X – Section 3.30, Table S.2.2. Categories of Device and Methods of Sealing, B3: VTM-26.X – Section 3.31, Table S.2.2. Categories of Device and Methods of Sealing, B3: LPG-26.X – Section 3.32, Table S.2.2. Categories of Device and Methods of Sealing, B3: CLM-26.X – Section 3.34, Table S.2.5. Categories of Device and Methods of Sealing, B3: MLK-26.X – Section 3.35, Table S.2.3. Categories of Device and Methods of Sealing, B3: WTR-26.X – Section 3.36, Table S.2.1. Categories of Device and Methods of Sealing, B3: MFM-26.X – Section 3.37, Table S.3.5. Categories of Device and Methods of Sealing, B3: CDL-26.X – Section 3.38, Table S.2.5. Categories of Device and Methods of Sealing, B3: HGM-26.X – Section 3.39, Table S.3.3. Categories of Device and Methods of Sealing, B3: EMS-26.X – Section 3.41, Table S.2.2. Categories of Device and Methods of Sealing, and B3: EVF-26.X – Section 3.40, Table S.3.3. Categories of Device and Methods of Sealing.

NIST OWM Recommendation: Developing

- OWM agrees that similar language would help with the interpretation of the Method of Sealing for Category 3 devices throughout NIST HB 44 Measuring Codes and possibly other codes.
- In the proposed language, use of the term "May" could be misinterpreted as having an option not to have event logger information.
- As such, based on the LMD Method of Sealing for Category 3, NIST OWM proposes the following or similar language to replace the Method of Sealing for Category 3 of the Measure Codes:

  *An event logger is required in the device; it must include an event counter (000 to 999), the parameter ID, the date and time of the change, and the new value of the parameter. The event logger information shall be available at the time of inspection either as a printed copy or transmitted in an electronic format. The event logger shall have a capacity to retain records equal to 10 times the number of sealable parameters in the device, but not more than 1000 records are required. (**Note:** Does not require 1000 changes to be stored for each parameter.)*

- Since the EVSE and the Tentative NUEMS codes differ more from other Measuring Codes more feedback is needed from these industries on the NIST, OWM proposed language.
- It should be noted that the most recent proposal includes language that is in upright roman type, indicative of a retroactive requirement. The majority of the requirements for sealing are nonretroactive requirements.
  - It is unclear whether the intent of the NTEP Measuring Sector is to make these requirements retroactive or if this is just their preferred language.

ITEM BLOCK 4 (B4) ELECTRIC VEHICLE ~~FUELING SYSTEMS~~ SUPPLY EQUIPMENT

NIST OWM Executive Summary for B4: OTH-26.3 – Handbook 44 Main Table of Contents, B4: OTH-26.4 – Section 3 Table of Contents, B4: EVF-26.4 – Section 3.40. Electric Vehicle Fueling Systems Supply Equipment, B4: EMS-26.1 – A. Application, and B4: TIM-26.1 – S.1.4. Recorded Representations

NIST OWM Recommendation: Voting, with suggested edits to Section 3.41 NUEMS

- OWM supports renaming Section 3.40. Electric Vehicle Fueling Systems, replacing the phrase "Electric Vehicle Fueling Systems" with "Electric Vehicle Supply Equipment", in the title and throughout NIST HB 44.

- Because the phrase "Electric Vehicle Supply Equipment" is used in most instances in NIST HB 44 when referring to devices that supply electrical energy to electric vehicles, it is defined in Appendix D, and is used in NIST HB 130 in the Method of Sale for Retail Sales of Electricity Sold as a Vehicle Fuel, this proposed change will make both handbooks terminology more consistent.

- For additional clarity and consistency, OWM suggests replacing the phrase " Electric Vehicle Fueling Systems" at the beginning of part (c) of paragraph A.2. in Section 3.41. with "Systems used for the measurement of electricity dispensed in vehicle fuel applications". It would then read as:

  (c) Systems used for the measurement of electricity dispensed in vehicle fuel applications. (See 3.40. Electric Vehicle Fueling Equipment Code).