National Type Evaluation Program (NTEP) Committee
2019 Interim Meeting Agenda

Mr. James Cassidy, Committee Chair
Massachusetts

INTRODUCTION

The NTEP Committee will address the items in Table A during the Interim Meeting. Table A identifies the agenda items by reference key, title of item, page number and the appendices by appendix designations. The first four digits of an item's reference key are assigned from the Subject Series List. The acronyms for organizations and technical terms used throughout the agenda are identified in Table B. In some cases, background information will be provided for an item. The fact that an item appears on the agenda does not mean it will be presented to National Conference on Weights and Measures (NCWM) for a vote. The Committee will review its agenda and may withdraw some items, present some items for information meant for additional study, issue interpretations, or make specific recommendations for change to the publications *NCWM Publication 14, Administrative Policy* and *NCWM Publication 14, Technical Policy, Checklists, Test Procedures*. Changes to *NCWM Publication 14, Administrative Policy* are by recommendation of the Committee and a majority vote of the Board of Directors. Changes to *NCWM Publication 14, Technical Policy, Checklists, Test Procedures* are by recommendation of the National Type Evaluation Technical Committee (NTETC) sectors and a majority vote of the NTEP Committee. The Committee may also take up routine or miscellaneous items brought to its attention after the preparation of this document. The Committee may decide to accept items for discussion that are not listed in this document, providing they meet the criteria for exceptions as presented in NCWM Policy 3.1.4. Handbooks, *Procedures to Modify Handbooks*. The Committee has not determined whether the items presented will be Voting or Informational in nature; these determinations will result from their deliberations at the Interim Meeting.

An "Item under Consideration" is a statement of proposal and not necessarily a recommendation of the Board of Directors. Suggested revisions are shown in **bold face print** by ~~**striking out**~~ information to be deleted and **underlining** information to be added. Requirements that are proposed to be nonretroactive are printed in ***bold faced italics***.

All sessions are open to registered attendees of the conference. If the Committee must discuss any issue that involves proprietary information or other confidential material; that portion of the session dealing with the special issue may be closed provided that (1) the Chairman or, in his absence, the Chairman-Elect approves; (2) the Executive Director is notified; and (3) an announcement of the closed meeting is posted on or near the door to the meeting session and at the registration desk. If at all possible, the posting will be done at least a day prior to the planned closed session.

Note: The policy is to use metric units of measurement in all of its publications; however, recommendations received by NCWM technical committees and regional weights and measures associations have been printed in this publication as submitted. Therefore, the report may contain references to inch-pound units.

Subject Series List

Table A
Table of Contents

Appendices

Table B
Glossary of Acronyms and Terms

Acronym	Term	Acronym	Term
CC	Certificate of Conformance	NCWM	National Conference on Weights and Measures
CIML	International Committee of Legal Metrology	NIST	National Institute of Standards and Technology
DoMC	Declaration of Mutual Confidence	NTEP	National Type Evaluation Program
IV	Initial Verification	OIML	International Organization of Legal Metrology
MAA	Mutual Acceptance Arrangement	OIML-CS	International Organization of Legal Metrology – Certificate System
MC	Measurement Canada	OWM	Office of Weights and Measures
MDMD	Multiple Dimension Measuring Devices	R	Recommendation
MRA	Mutual Recognition Arrangement	VCAP	Verification Conformity Assessment Program

Details of All Items
(In order by Reference Key)

INT – INTERNATIONAL

INT-1 Mutual Recognition Arrangement (MRA)

Background/Discussion:
The MRA between Measurement Canada (MC) and NTEP labs originated April 1, 1994. Since that time, the original MRA has expanded, and a second MRA covering measuring devices was developed. On Tuesday July 26th, 2016, NCWM Chairman Jerry Buendel and Measurement Canada President Alan Johnston signed a renewal MRA that provides for continued cooperation between the two organizations and continuation of the beneficial partnership. The new MRA will be effective for 5 years.

The scope of the current MRA includes:

- gasoline and diesel dispensers;
- high-speed dispensers;
- gasoline and diesel meters intended to be used in fuel dispensers and truck refuelers;
- electronic computing and non-computing bench, counter, floor, and platform scales with a capacity up to 1000 kg (2000 lb);
- weighing/load receiving elements with a capacity of up to 1000 kg (2000 lb);
- electronic weight indicating elements (except those that are software based, i.e., programmed by downloading parameters); and
- mechanical scales up to 10 000 kg (20 000 lb).

MC, NTEP, and all our mutual stakeholders agree that the MRA is a benefit for the North American weights and measures industry. The NTEP Committee appreciates the efforts and cooperation of Measurement Canada and is working with MC to continue the cooperative arrangement.

The NTEP Weighing and Measuring Laboratories held their annual meeting and training in Gatineau/Ottawa Canada April 3-5, 2018. During that time all representatives attended a session at the at the Measurement Canada facilities. NCWM/NTEP wants to state their appreciation for the hospitality of the Measurement Canada staff.

INT-2 OIML-Certification System (CS)

Background/Discussion:
In January 2018 the International Organization of Legal Metrology (OIML) MAA was officially replaced with the OIML-Certification System (CS). Information regarding the OIML-CS can be found at www.oiml.org/maa/en/oiml-cs/general. NCWM signed the OIML MAA Declaration of Mutual Confidence (DoMC) for Recommendation (R) 60 Load Cells as a Utilizing Participant in 2006 and NCWM signed the OIML-CS Utilizer Declaration in January 2018. A Utilizer is a participant which does not issue any OIML Certificate of Conformance (CC) nor OIML Test Reports but does utilize the reports issued by OIML-CS Issuing Authorities.

Because of difficulties encountered by the International Bureau of Legal Metrology (BIML) in adequately obtaining and summarizing peer review and/or accreditation data from the MAA test laboratories, it was proposed that a more robust OIML Certification System (OIML-CS) be developed that has a Management Committee to develop policy (subject to approval by the International Committee on Legal Metrology, or CIML) and oversee operations. A preliminary Framework Document for developing the OIML-CS was prepared and was presented to the CIML and approved at the 2016 CIML Meeting (in Strasbourg, France). On this basis, an OIML-CS Preliminary Management Committee (PrMC) was formed, which continued the work of developing the additional OIML-CS documents. Dr. Ehrlich represented the U.S. on the PrMC at meetings in Berlin, Germany, in February 2017, and in Shanghai, China, in June 2017. Mr. Darrell Flocken from NCWM/NTEP accompanied Dr. Ehrlich to the Shanghai meeting, which also included a Seminar on the OIML-CS and a final meeting of the MAA Committee on Participation Review (CPR). The CIML approved the OIML-CS Framework Document (OIML B 18) at its annual meeting in Cartagena, Colombia, in October 2017, and the OIML-CS went into effect in January 2018.

Dr. Ehrlich serves on the Management Committee of the OIML-CS, and Mr. Flocken will serve on the Review Committee. The US (NTEP) supported the OIML-CS process and has agreed to continue accepting OIML-CS R 60 test data for load cells with the provision that any use of manufacturer test data was clearly identified on the test report section of the certificate because NTEP cannot use manufacturer test data towards issuance of an NTEP certificate. The OIML-CS criteria align with the NTEP Committee's recommendations and the instructions provided by the NCWM Board of Directors.

Dr. Ehrlich requested, on multiple occasions, that NCWM review its policy regarding participation in the OIML MAA (and now the OIML-CS) R76 (Non-Automatic Weighing Instruments). The NCWM Board recapped the decision process to participate in the utilization of R60 test data. Existing policy from 2006 is not to participate in R76 until NCWM can do so as an Issuing Participant., now referred to under the OIML-CS as an Issuing Authority. The Board has revisited the 2006 discussions leading to that decision, including considerations for NTEP labs' work load, potential lost expertise, concerns with quality of evaluations at some foreign labs, etc. Dr. Ehrlich wanted NCWM to reconsider and, if there was no possibility in sight that the NCWM could become an Issuing Authority, then it should consider becoming a Utilizer Participant for OIML R76. Some U.S. manufacturers support NCWM policy, but others would like to have one-stop shopping. The OIML-CS also includes R49 (water meters), and R117 (RMFD) will be added next year (under what is called "Scheme A", which is the introductory level of the OIML-CS where "self-declaration" is used as the basis for demonstrating compliance with the OIML-CS). OIML R60 and OIML R76 are already under "Scheme A", where either accreditation or peer review required. Since there are no new developments to affect the decision, the NCWM Board of Directors agreed to maintain existing policy at this time.

From January 2011 to October 2018, ninety-one NTEP certificates for load cells were issued under the former MAA, now OIML Certification System. The NTEP Administrator has reviewed all test data and drafted the NTEP certificates.

Dr. Ehrlich is representing the U.S. interests in this work and will update the Board at the NCWM Interim Meeting in January 2019.

ACT – ACTIVITY REPORTS

ACT-1 NTEP Participating Laboratories and Evaluations Reports

Background/Discussion:
The NTEP weighing and measuring laboratories held a joint meeting April 3-5, 2018, in Ottawa, Canada.

The NTEP weighing laboratories also met in August 2018, prior to the NTEP Weighing Sector meeting and the measuring laboratories met in September 2018, prior to the NTEP Measuring Sector meeting in Baltimore, MD to discuss current issues.

NTEP continues to routinely survey customers pertaining to NTEP administration and laboratories customer service. The survey is released to active CC holders. The board routinely reviews the results of the survey to form a continuous improvement plan for NTEP. With any survey, the challenge is to develop a document that is concise enough that customers will respond, while also providing a meaningful set of data. To date, the NCWM Board of Directors is finding general approval of NTEP services.

During the 2018 Annual Meeting the Committee reviewed NTEP statistics through June 2018. The review of statistics shows that incoming applications are relatively comparable to normal and there exist no significant laboratory backlog issues. See Appendix A for NTEP statistics.

The 2019 meeting of the NTEP Participating Laboratories is scheduled for March 26-28, 2019 in Tulsa, Oklahoma.

ACT-2 NTEP Sector Reports

Background/Discussion:
All NTEP Sector reports were available to members at the time *NCWM Publication* 15 was published. The NTEP Committee is committed to ensuring that electronic versions of sector reports are available with *NCWM Publication* 15. Please note that the sector reports will only be available in the electronic version of *NCWM Publication* 15 at ncwm.net/meetings/interim/archive; they will not be available in the printed versions of *NCWM Publication* 15.

NTEP Belt-Conveyor Scale Sector:
The NTEP Belt-Conveyor Scale Sector last met February 23, 2016, in Pittsburgh, PA. The sector did not have sufficient NIST Handbook 44 and NCWM Publication 14 agenda items to justify a meeting in 2017 or 2018.

The next meeting of the NTEP Belt-Conveyor Scale Sector is being considered for late 2019 but has not been scheduled at this time. For questions on the status of sector work or to propose items for a future meeting, please contact the sector Technical Advisor:

Technical Advisor
Mr. John Barton
NIST, OWM
100 Bureau Drive, MS 2600
Gaithersburg, MD 20899
Phone: (301) 975-4002
Fax: (301) 975-8091
Email: john.barton@nist.gov

NTEP Grain Moisture Meter and NIR Protein Analyzer Sectors:

The NTEP Grain Analyzer Sector met August 15-16, 2018 in Kansas City. MO. A draft of the final summary was provided to the Committee prior to the 2019 NCWM Interim Meeting for review and approval (See Appendix B).

The next meeting of the NTEP Grain Moisture Meter and NIR Protein Analyzer Sectors is scheduled for August 13, 2019 in Kansas City, MO. For questions on the status of sector work or to propose items for a future meeting, please contact the Technical Advisor:

Technical Advisor
Ms. G. Diane Lee
NIST, OWM
100 Bureau Drive, MS 2600
Gaithersburg, MD 20707
Phone: (301) 975-4005
Fax: (301) 975-8091
Email: diane.lee@nist.gov

NTEP Measuring Sector:
The NTEP Measuring Sector met September 25-26, 2018 in Baltimore, MD. A draft of the final summary was provided to the Committee prior to the 2019 NCWM Interim Meeting for review and approval. (See Appendix C)

The next meeting of the NTEP Measuring Sector Meeting is scheduled for late September 24-25, 2019 in Denver, CO. For questions on the status of sector work or to propose items for a future meeting, please contact the sector Technical Advisor:

Technical Advisor
Ms. Tina Butcher
NIST, OWM
100 Bureau Drive, MS 2600
Gaithersburg, MD 20899
Phone: (301) 975-2196
Fax: (301) 975-8091
Email: tina.butcher@nist.gov

NTEP Software Sector:
The NTEP Software Sector met August 22-23, 2018 in Louisville, KY. It was a joint meeting with the NTEP Weighing Sector. A final draft of the meeting summary was provided to the Committee prior to the 2019 NCWM Interim Meeting for review and approval. (See Appendix D)

The next meeting of the NTEP Software Sector is scheduled for September 25-26, 2019 in Denver, CO. The meeting will be a joint meeting of the NTEP Measuring Sector and Software Sector. For questions on the status of sector work or to propose items for a future meeting, please contact the sector Chair and/or the NTEP Specialist:

Chair
Mr. James Pettinato
FMC Technologies Measurement Solutions, Inc.
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NTEP Specialist
Mr. Darrell Flocken
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1135 M Street, Suite 110
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NTEP Weighing Sector:
The NTEP Weighing Sector met August 21-23, 2018, in Louisville, KY. This was a joint meeting with the NTEP Software Sector. A final draft of the meeting summary was provided to the Committee prior to the 2019 NCWM Interim Meeting for review and approval. (See Appendix E)

The next NTEP Weighing Sector meeting is scheduled for August 20-21, 2019 in Denver, CO. For questions on the status of sector work or to propose items for a future meeting, please contact the sector Technical Advisor:

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Fax: (301) 975-8091
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NTEP Multiple Dimension Measuring Devices (MDMD) Work Group:
The NTEP MDMD Work Group met May 8-9, 2018, in Columbus, OH. A final draft of the meeting summaries was provided to the Committee prior to the 2019 NCWM Interim Meeting for review and approval. (See Appendix F)

The next NTEP MDMD Work Group meeting is scheduled for May 7-8, 2019 in Columbus, OH. For questions on the status of work group or to propose items for a future meeting, please contact Work Group Chair Chris Senneff or NTEP Specialist Darrell Flocken.

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The NTEP Committee is scheduled to review and approve all 2018 NTEP Sector and Work Group reports during the 2019 Interim Meeting.

CAP – CONFORMITY ASSESSMENT PROGRAM

CAP-1 Conformity Assessment Program

Background/Discussion:
The Conformity Assessment Program was established to ensure devices produced after the device has been type evaluated and certified by NTEP continue to meet the same requirements. This program has three major elements: 1) Certificate Review (administrative); 2) Initial Verification (inspection and performance testing); and 3) Verified Conformity Assessment (influence factors). This item is included on the Committee's agenda to provide an update on these elements.

Certificate Review:
Certificates are constantly under review by NTEP staff and laboratories. Many active certificates are amended annually because of manufacturer submission for evaluation or issues reported by the states pertaining to information on the certificate. When the devices are re-evaluated and certificates are amended, all information is reviewed and necessary steps are taken to assure compliance and that accurate, thorough information is reported on the certificate.

In an effort to keep certificate information up to date, the Committee continues to offer an opportunity for active certificate holders to update contact information that is contained in the "Submitted By" box on certificates. This is offered during the payment period of their annual maintenance fee. Many CC holders have taken advantage of the opportunity for hundreds of NTEP certificates.

Initial Verification (IV):
The IV initiative is ongoing. Field enforcement officials perform an initial inspection and test on new installations on a routine basis. The Committee recognized that the states do not want IV reporting to be cumbersome.

An IV report form was developed several years ago. The Committee desired a simple form, perhaps web-based for use by state and local regulators. The form was approved by the Committee and distributed to the states. A completed form can be submitted via mail, e-mail, fax, or online. The form is available to regulatory officials who are members of NCWM at www.ncwm.net/ntep/conformity/verification.

NTEP has acknowledged that the state, county and city regulators have not bought into the IV report form. Industry representatives stated that IV is very important to ensure conformity assessment and the NCWM should push harder for reporting of non-compliance issues found during IV.

NTEP is open to suggestions on how to improve the reporting of non-compliant devices found during initial verification.

VCAP:
NCWM has been concerned about production meeting type and protecting the integrity of the NTEP CC since the inception of NTEP. The board has consistently reconfirmed its belief that conformity assessment is vital to NTEP's continued success.

Load cells traceable to NTEP certificates were selected for the initial assessment effort. NCWM elected to require a systems audit checklist that is to be completed by an outside auditor and submitted to NCWM per Section 221.3.3.3.5 of the VCAP requirements. A VCAP Systems Audit Checklist for Manufacturers and a VCAP Systems Audit Checklist for Private Label Certificate Holders have been developed and are available on the website at www.ncwm.net/ntep/conformity/vcap/checklists-faqs. Additionally, the Committee developed a new *NCWM Publication 14*, administrative policy to distinguish between the requirements for parent NTEP certificate holders (21.3.3.2) and private label certificate holders. The requirements in 21.3.3.7 track the private label checklist requirements: traceability to parent NTEP CC, traceability of the private label cell to a VCAP audit, purchase and sales records, plan to report non-conforming product and non-conforming product in stock, plan to conduct internal audits to verify non-compliance action, and internal audit records.

Updated Statistics: The Committee was given updated VCAP statistics and information during the 2018 Annual Meeting. As a result of VCAP activities for July 1, 2017 to June 1, 2018:

- **Load Cells:**
  - 29 new or amended CC's were issued since July 1, 2017. Of these 29, 3 CC were issued to 2 new manufacturers. Manufacturers have until November 2018 to become VCAP compliant.
  - No CC were made inactive since July 1, 2017 because of VCAP noncompliance.

- **W/LRE ≥ 2000 lb w/non NTEP load cells:**
  - 13 new or amended CC's, within this VCAP device category, were issued since July 1, 2017. Of these 13, 1 CC was issued to a new manufacturer. The manufacturer has until February 2019 to become VCAP compliant.
  - No CC were made inactive since July 1, 2017 because of VCAP noncompliance.

- **Indicating Elements:**
  - 18 new or amended CC's were issued since July 1, 2017. Of these 18, 2 CC's were issued to 2 new manufacturers. The manufacturers have until March and August 2019 to become VCAP compliant.
  - No CC were made inactive since July 1, 2017 because of VCAP noncompliance.

- **Complete Scales:** This device category has a compliance deadline of the end of June 2018 for manufacturers and the end of December 2018 for private label CC holders.
  - 5 new CC holding companies have been added to VCAP for this category of device types since the original 56 reported on last year; bringing the total number of manufacturers requiring VCAP audits to 61.
    - 57 are manufacturers
    - 4 are private labelers.
  - 63 new or amended CC's were issued since July 1, 2017

- For the addition of this device type, and future device types, it is not possible to report on the exact number of manufacturers which have included this device type into their VCAP program. This is because of the most recent VCAP Policy change not requiring manufactures with current VCAP compliance status to undergo an audit for the new device type. Compliance will be determined at their external audit. We can report that 2 new manufacturers have received their first CC and have until January 2019 to become VCAP compliant.

Misc. VCAP Information:

1. To date the NTEP Specialist has audited 16 companies totaling 19 locations.
2. My current audit backlog, in scheduled audits, consists of 3 new companies and 1 current customer.
3. The NTEP Specialist will begin scheduling re-assessment audits (the 3-year schedule) in the second half of 2018.

VCAP Audits: The Committee had discussions about the required number of audits for facilities that manufacture multiple device types. For example, if a company had successful audits for two device types, they might submit a request for a delay from audit requirements for remaining device types, stating that they are all subjected to the same processes and will be audited in the next cycle. The Committee agreed to the request in principal and directed the NTEP Administrator to develop NCWM policy language. As a result, the following policy was adopted by the NCWM Board in 2013.

Adding Device Categories to VCAP:

Policy:

1. When a new device category is added to the VCAP requirement, NTEP will recognize the current VCAP audit certification in effect, submitted by a certificate holder, for the same certificate holder and same production facility(s), to cover the new device category, continue the manufacturing process for devices covered by NTEP certificates in the newly added device category, until the due date of the next VCAP audit.

   Example: If a company had successful audits for two device types, they might submit a request for exemption from audit requirements for remaining device types, stating that they are all subjected to the same quality management system and will be included in the next audit cycle. The next VCAP audit must be done within 3 years of the last audit and address all applicable device types produced within that facility.

Seven weighing device categories subject to influence factors, as defined in NIST Handbook 44, were identified and are subject to VCAP audits. Certificate holders for these device types are required to have an on-site audit of the manufacturer's quality system and on-site random and/or review of a production device by an outside auditor to verify compliance with VCAP. The NTEP Committee and NCWM Board agreed not to include weighing/load receiving elements using NTEP load cells in the list of device categories subject to VCAP. However, the Board notified certificate holders that they have no intention of amending the table of devices subject to influence factor testing found in the Weighing Devices Section of NCWM Publication 14.

Certificate holders are encouraged to research the VCAP requirements on the NCWM website under the NTEP, Conformity Assessment section. Certificate holders are encouraged to review the VCAP requirements applicable to their devices and report concerns to the NTEP Committee.

The following disclaimer has been advertised and communicated by NCWM: "NCWM is working to identify all active certificates subject to VCAP compliance. As a courtesy, affected certificate holders are being notified of VCAP requirements and the established time line. Please note that the NCWM Board of Directors does not consider it to be NCWM's responsibility to notify all certificate holders about affected certificates. Certificate holders are responsible for reviewing their active NTEP certificates and compliance with VCAP."

The Committee has received letters, questions, and many other inquiries pertaining to VCAP. The Committee has worked diligently to answer the questions submitted in a very timely manner. The Committee knows that additional questions will be posed as VCAP progresses. Certificate holders and other interested parties are encouraged to submit written questions to the NTEP Committee. The Committee is pleased to report that it has been successful in answering all the questions to date. Clerical changes and additions have been made to affected VCAP documents as deemed necessary.

CAP-2 Timelines for Remaining Device Categories Subject to VCAP

Source: NTEP Committee

Item Under Consideration:
NCWM decided to include the remaining device categories subject to VCAP as soon as practicable. In 2016, the Committee worked to develop a timeline to include the remaining categories. NTEP has developed the following timelines to phase in the remaining device categories. The timelines identify the inclusion of the remaining device types into the NTEP, Verified Conformity Assessment Program. Each timeline includes both manufacturers and private label holders of Certificates of Conformance for the device type. The NTEP Committee is moving forward with the following timelines.

Background/Discussion:
The Committee heard comments proposing that the remaining device categories be phased in over a several-year period. The Committee appreciates the input from the stakeholders.

When VCAP requirements are applied, the certificate holder is required to have an on-site audit of the manufacturer's quality system and on-site random and/or review of a production device by an outside auditor to verify compliance with VCAP. Certificate holders are encouraged to research the VCAP requirements on the NCWM website under the NTEP, Conformity Assessment section, review the VCAP requirements applicable to their devices and report concerns to the NTEP Committee.

Automatic Weighing Systems:

<table>
<tr><th colspan="6">NCWM/NTEP VCAP Compliance Timeline
Automatic Weighing Systems</th></tr>
<tr><th>July 2017-
Sept 2017</th><th>July 2017-
Nov 2018</th><th>July 2017-
May 2019</th><th>July 2017-
Jun 2019</th><th>Dec 2018</th><th>Jun 2019</th></tr>
<tr><td rowspan="3">NTEP notifies active CC holders of VCAP requirements</td><td>Parent CC holders to put VCAP QM system in place</td><td>Private Label CC holders to put VCAP QM system in place</td><td>NTEP evaluates incoming audit reports</td><td rowspan="3">NCWM declares CCs inactive if Parent CC holder fails to comply with VCAP</td><td rowspan="3">NCWM declares CCs inactive if Private Label CC holder fails to comply with VCAP</td></tr>
<tr><td>CC holder to have audit completed by authorized auditing company</td><td>CC holder to have audit completed by authorized auditing company</td><td rowspan="2">NTEP contacts CC holders not meeting VCAP requirements to encourage compliance</td></tr>
<tr><td>Submit audit report to NCWM/NTEP</td><td>Submit audit report to NCWM/NTEP</td></tr>
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Automatic Bulk Weighing Systems:

NCWM/NTEP VCAP Compliance Timeline Automatic Bulk Weighing Systems					
Jan 2018- March 2018	**Jan 2018- May 2019**	**Jan 2018- Nov 2019**	**Jan 2018- Dec 2019**	**Jun 2019**	**Dec 2019**
NTEP notifies active CC holders of VCAP requirements	Parent CC holders to put VCAP QM system in place	Private Label CC holders to put VCAP QM system in place	NTEP evaluates incoming audit reports	NCWM declares CCs inactive if Parent CC holder fails to comply with VCAP	NCWM declares CCs inactive if Private Label CC holder fails to comply with VCAP
	CC holder to have audit completed by authorized auditing company	CC holder to have audit completed by authorized auditing company	NTEP contacts CC holders not meeting VCAP requirements to encourage compliance		
	Submit audit report to NCWM/NTEP	Submit audit report to NCWM/NTEP			

Belt-Conveyor Scales:

NCWM/NTEP VCAP Compliance Timeline Belt-Conveyor Scales					
July 2018- Sept 2018	**July 2018- Nov 2019**	**July 2018- May 2020**	**July 2018- Jun 2020**	**Dec 2019**	**Jun 2020**
NTEP notifies active CC holders of VCAP requirements	Parent CC holders to put VCAP QM system in place	Private Label CC holders to put VCAP QM system in place	NTEP evaluates incoming audit reports	NCWM declares CCs inactive if Parent CC holder fails to comply with VCAP	NCWM declares CCs inactive if Private Label CC holder fails to comply with VCAP
	CC holder to have audit completed by authorized auditing company	CC holder to have audit completed by authorized auditing company	NTEP contacts CC holders not meeting VCAP requirements to encourage compliance		
	Submit audit report to NCWM/NTEP	Submit audit report to NCWM/NTEP			

Background/Discussion:

Two scale companies requested that NTEP consider exempting Automatic Weighing Systems (AWS) and Automatic Bulk Weighing Systems (ABWS) from the VCAP audit requirement if they utilize NTEP certified load cells. The Committee discussed both device categories during their work session. The Committee found that all AWS NTEP certificates were for complete devices per NTEP Technical Policy. Some research also revealed that most ABWS certificate were for the ABWS controller. The hoppers normally used in an ABWS are covered by their own weighing/load-receiving NTEP and are several thousand-pound capacity, hence already outside the VCAP requirement since they exceed the 2000 lb capacity or less threshold. The Committee was made aware of three NTEP certificates for ABWS which have a capacity of 2000 lb or less but all three were for complete weighing devices. The Committee concluded that certificates for AWS and ABWS devices are for complete scales or indicating elements/controllers and require a VCAP audit.

Additional comments from affected stakeholders are welcomed and appreciated.

ADM – NCWM PUBLICATION 14, ADMINISTRATIVE POLICY

ADM-1 Amend VCAP Sections 21.1.3.1. and 21.1.3.6.

Source: Scale Manufacturers Association

Purpose: Clarify NTEP Administrative Policy VCAP requirements list for both original (Section 21.1.3.1.) and private label (Section 21.1.3.6.) certificate holders to show there is a capacity limitation that applies.

Item under Consideration: Amend NCWM Publication 14, Administrative Policy, Section 21.1.3.1. NTEP VCAP Procedures as follows:

21.1.3.1 Devices that Must Meet this Requirement are Limited to the List Below:

- Load Cell (T.N.8.)
- Indicating Elements (T.N.8.)
- Weighing/Load Receiving Elements **2000lb capacity and less** with non-NTEP Load Cells (T.N.8.)
- Complete Scales **2000lb capacity and less** (T.N.8.)
- Automatic Weighing Systems **2000lb capacity and less** (T.7.)
- Belt-Conveyor Scales **2000lb capacity and less** (T.3)
- Automatic Bulk Weighing Systems **2000lb capacity and less** (T.7.)

Amend NCWM Publication 14, Administrative Policy, Section 21.1.3.6. NTEP VCAP Procedures for Private Label Certificate Holders as follows:

21.1.3.6 Devices that Must Meet this Requirement are Limited to the List Below:

- Load Cell (T.N.8.)
- Indicating Elements (T.N.8.)
- Weighing/Load Receiving Elements **2000lb capacity and less** with non-NTEP Load Cells (T.N.8.)
- Complete Scales **2000lb capacity and le**ss (T.N.8.)
- Automatic Weighing Systems **2000lb capacity and less** (T.7.)
- Belt-Conveyor Scales **2000lb capacity and less** (T.3)
- Automatic Bulk Weighing Systems **2000lb capacity and less** (T.7.)

Justification: The requirements for VCAP influence testing do not clarify that they are for devices of 2000lb or less. This stipulation is generally known, but it needs to be properly documented in the handbook to eliminate any "grey areas" of enforcement for VCAP audits.

Discussion: NTEP views the proposals as clerical in nature. The NTEP Committee is considering recommending the proposed changes. Comments are welcomed.

ADM-2 Change VCAP Audit Frequency in Sections 3.2.16. and 3.7.10.

Source: Scale Manufacturers Association

Purpose: Change NTEP Administrative Policy VCAP surveillance requirements for both original (Section 3.2.16.) and private label (Section 3.7.10.) certificate holders so audit frequency can be extended from every 3 years to every 5 years.

Item under Consideration: Amend NCWM Publication 14, Administrative Policy, Section 21.3.2.16. NTEP VCAP Procedures as follows:

3.2.16. ~~**Subsequent audits will be held on-site to verify conformance to these standards. Subsequent audits will be conducted every three years until objective evidence is obtained to move to a maximum of every five years.**~~

Surveillance audits shall be conducted at the manufacturer's facility to verify conformance to these standards. These audits will be conducted every (3) years until the following criteria has been met:

- **The manufacturer has completed at least (2) surveillance audits by a VCAP auditor.**

- **No major non-conformances are reported on the previous (2) surveillance audits.**
- **All actions taken to correct minor non-conformances have been verified and accepted by the auditor.**

Once these criteria have been met the manufacturer may notify the VCAP administrator and request that the surveillance audit schedule be extended to every (5) years. The (5) year audit schedule will apply until any of the criteria is not met, at which point the audit schedule will reset back to every (3) years and the process will begin anew.

Amend NCWM Publication 14, Administrative Policy, Section 21.3.7.10. NTEP VCAP Procedures for Private Label Certificate Holders as follows:

3.7.10. ~~**Surveillance audits for VCAP conducted by an outside auditor representing a certification every three years until objective evidence is obtained to move to a maximum of every five years.**~~

Surveillance audits shall be conducted at the manufacturer's facility to verify conformance to these standards. These audits will be conducted every (3) years until the following criteria has been met:

- **The manufacturer has completed at least (2) surveillance audits by a VCAP auditor.**
- **No major non-conformances are reported on the previous (2) surveillance audits.**
- **All actions taken to correct minor non-conformances have been verified and accepted by the auditor.**

Once these criteria have been met the manufacturer may notify the VCAP administrator and request that the surveillance audit schedule be extended to every (5) years. The (5) year audit schedule will apply until any of the criteria is not met, at which point the audit schedule will reset back to every (3) years and the process will begin anew.

Justification: Creation of objective criteria to extend the audit frequency that is currently lacking in the NTEP Administrative Policy.

Discussion: NTEP administration has internally discussed the proposals and does not support the proposals as written but could consider support if a) The criteria were changed to require both audits to be performed by the same auditor., and b) The criteria were changed to place the responsibility/decision of extending the resetting of the audit time line, based upon the criteria, to the auditor.

OTH – OTHER ITEMS

OTH-1 Electronic Vehicle Fueling Systems (EVFS)

Source: California Division of Measurement Standards & NTEP Measuring Laboratories

Item Under Consideration:
Work with U.S. National Work Group Representatives and other experts to develop an NTEP checklist for electronic vehicle supply equipment (EVSE).

Background/Discussion:
In July 2015, the NCWM adopted a tentative code for electronic vehicle fueling systems. The tentative code includes a provision that allows NTEP to accept EVSE for type evaluation to the NIST Handbook 44 code. The USNWG for EVSE developed the tentative code in Handbook 44 and has been working to address evaluation criteria (NTEP checklist) and test standards to be used.

The NTEP Measuring Labs discussed the item during their meeting on September 20, 2016. The consensus of the laboratories was that the examination procedure outline developed by the State of California was not in a proper

NCWM Pub 14 checklist format. Another prime issue that is still being developed is the test equipment necessary to test these devices. NTEP cannot evaluate without standards for test equipment. Will NIST traceability be required? The Measuring Laboratories concluded that the present Pub 14 checklist for RMFDs would be a good starting point to use in drafting a Pub 14 checklist for EVSE. The NTEP Administrator and NTEP Measuring Laboratories recommend the NCWM Board of Directors / NTEP Committee consider establishing an NTEP Work Group or Task Force to address the EVSE issues.

The NTEP Committee agreed with the recommendations of the NTEP Measuring Laboratories and worked to establish a NTEP EVSE Work Group. The NTEP EVSE Work Group was developed with Mr. Andrei Moldoveanu, Senior Program Manager for NEMA appointed as Chair. The Work Group currently consisted of three public sector members and five private sector members representing associate membership.

THE NTEP EVSE Work Group (WG) had their kick-off web-based meeting March 14, 2017. The WG had monthly web meetings with the initial goal of having a draft checklist ready for NCWM Board/NTEP Committee review. Significant progress has been made and during the 2018 Interim Meeting the NTEP Committee reviewed the updated Work Group's draft NTEP checklist. NTEP was given permission to proceed with checklist development and evaluations as deemed appropriate. NTEP is working with NIST/OWM to ensure proper requirements for test standards and test procedures are in place. Some technical policy issues still need to be worked out. Additionally, NTEP found out that many of these devices also have a timing feature to allow a charge for parked time (similar to a parking meter). NTEP will work to develop a timing feature supplemental checklist to the EVSE checklist.

The CA Lab is in the process of purchasing EVSE test standards for both laboratory and field testing. The test standards delivery and associated training have been delayed. NTEP expects to perform the initial evaluation of an EVSE device in 2019. For questions on the status of the work group please contact NTEP Administrator Jim Truex at jim.truex@ncwm.net .

OTH-2 Create a NCWM Publication 14 Category for Software

Source: NTEP Software Sector

Item Under Consideration:
Create a Publication 14 Software category, which includes requirements, considerations and test procedures common to all software-based devices, including software-only products.

Background/Discussion:
There is no single Publication 14 device category in which to place software-specific requirements, considerations and test procedures. Since most modern measurement devices contain software, to appropriately address any concerns each section of Publication 14 must include all software considerations. Further, each device section has a different governing Sector, which makes the process of change an exercise in convincing each Sector to make needed additions while keeping those additions harmonized across Sectors; an effort that has proven very difficult and time consuming.

Such a software section might include the following:

1. Models to be submitted for evaluation
    a. What constitutes approved software?
        i. Measurement and presentation
        ii. Calculations based on a measured value
        iii. Manual entry of measured value
        iv. Other
    b. Application of software may lead to additional Pub. 14 section consideration
    c. Minimum computing requirements statement
2. Software Identification
    a. Appropriate means of 'marking' metrologically significant software

b. Software Separation and marking consequences
c. Relationship between software and software identifier
d. Presentation of software identifier
    i. Example icons and menu text
    ii. Exceptions

3. Protection against unauthorized software change
    a. How is software "sealed"?
    b. Remote software update considerations
    c. Audit trail (if employed) requirements for software updates
4. Accuracy of data calculations
    a. When to stop evaluating calculations & data manipulation
5. Software Evaluation Checklist

Future Topics

1. Distributed software considerations
    a. Securing communications between metrologically significant distributed software modules or components of a system

The NTEP Committee reviewed and discussed the proposal from the NTEP Software Sector. The Committee is very interested in this idea but heard no comment during the 2018 Interim Meeting open hearings. During the 2018 Annual Meeting open hearings NTEP Software Sector Chair Mr. Jim Pettinato encouraged the Committee to seriously consider and move forward with the proposal. The Sector thinks this would improve the type evaluation process and avoid deviation in language or requirements from Pub 14 section to Pub 14 section. He also pointed out that internationally there is a separate document for software.

The Board of Directors and NTEP Committee plan to move forward and allow the NTEP Software Sector to begin development of a software checklist section for NCWM Publication 14. The Committee is requesting additional input from manufactures, NTEP sectors and others from the weights and measures community.

Mr. James Cassidy, Massachusetts | NTEP Committee Chair
Mr. Brett Gurney, Utah | NCWM Chairman
Mr. Craig VanBuren, Michigan | NCWM Chair-Elect
Mr. Hal Prince, Florida | Member
Mr. Jack Walsh, Town of Wellesley, Massachusetts | Member
Mr. Jim Truex, NCWM | NTEP Administrator

National Type Evaluation Program Committee

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Appendix A

NTEP Statistics Report

General NTEP Statistics	Last Year	This Year
	10/01/16 – 9/30/17	10/01/17 – 9/30/18
Total Applications Processed	(25) 297	(15) 295
Applications Completed	320	288
New Certificates Issued	291	273
Active NTEP Certificates		2133

( ) = Reactivations

Assignments to Labs per Year	10/1/16 – 9/30/17	10/01/17 – 9/30/18
California	22	(3) 23
Canada	4	1
FGIS-IL	0	0
FDIS-KC	8	9
Kansas	1	3
Maryland	(1) 33	18
New York	(5) 26	(5) 32
NIST Force Group	4	6
North Carolina	10	(1) 11
Ohio	(2) 75	83
Oregon	0	0
NTEP Field	3	(1) 11
NTEP Administrator	119	101
Applications Not Yet Assigned to a Lab		0

( ) = Reassignments from another lab

Process Statistics	10/2008 - Present
Average Time to Assign an Evaluation	4.2 Days
Average Time to Complete an Evaluation	82.4 Days

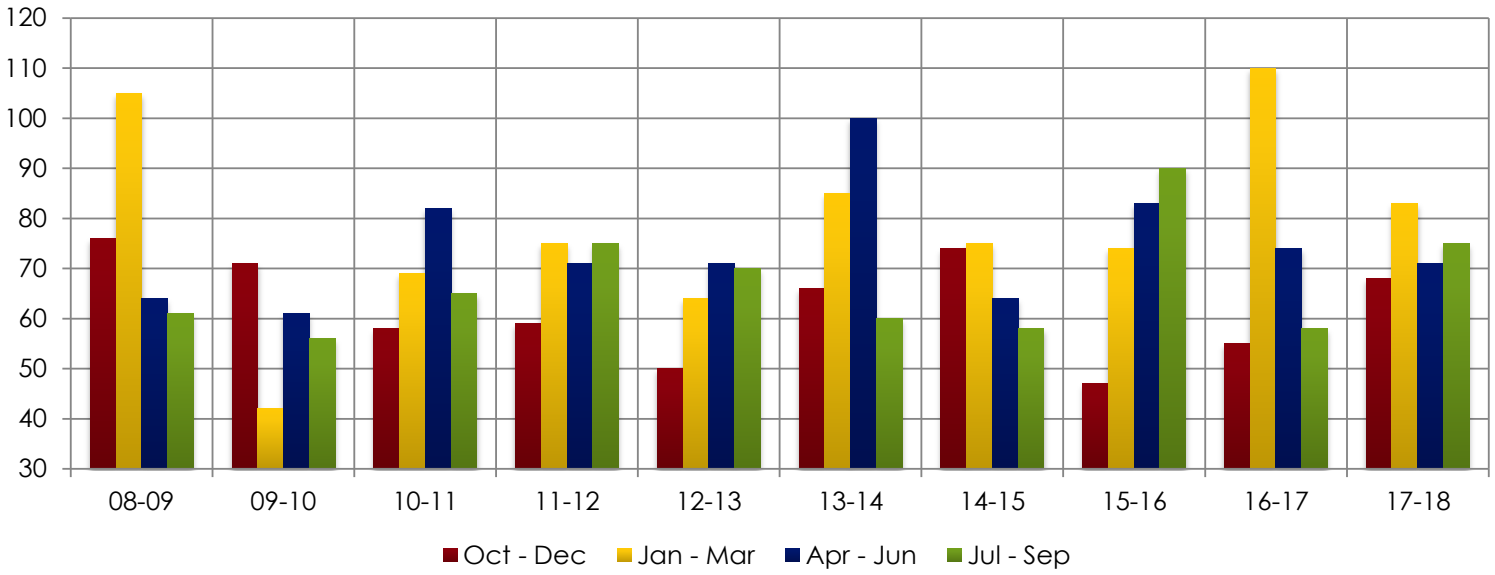
Report on Evaluations in Progress

Evaluations in Progress	0-3 Months	3-6 Months	6-9 Months	9-12 Months	Over 1 Year	Total
September 30, 2014	44	38	18	6	19	126
December 31, 2014	44	17	17	12	16	125
March 31, 2015	43	24	10	13	17	106
June 30, 2015	39	21	12	5	15	107
September 18, 2015	28	20	8	5	12	92
December 23, 2015	43	14	5	7	13	73
March 31, 2016	48	15	7	6	8	82
June 30, 2016	57	13	7	3	7	84
September 30, 2016	60	31	9	5	7	87
December 22, 2016	34	30	21	6	9	112
March 30, 2017	45	14	6	12	7	100
June 30, 2017	42	27	5	5	11	84
September 30, 2017	32	21	16	4	14	90
December 31, 2017	38	15	15	9	13	90
March 31, 2018	44	15	8	10	12	89
June 30, 2018	55	28	9	4	12	108
September 30, 2018	**39**	**27**	**14**	**3**	**7**	**90**

In Progress by Lab	0-3 Months	3-6 Months	6-9 Months	9-12 Months	Over 1 Year	Total
California	7	2	1	1		**11**
Canada	1		2			**3**
FGIS-IL						**0**
FGIS-KC	1	6	1		1	**9**
Kansas	2					**2**
Maryland	1	4	6	1	5	**17**
New York	3	1	2		1	**7**
NIST Force Group		1	1	1		**3**
North Carolina	4		1			**5**
Ohio	12	10				**22**
Oregon						
NTEP Staff	8	3				**11**
Unassigned						

Total Pending: 90

10-Year Report on Applications Received by Quarter



	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18
Oct – Dec	76	71	58	59	50	66	74	47	55	68
Jan – Mar	105	42	69	75	64	85	75	74	110	83
Apr – Jun	64	61	82	71	71	100	64	83	74	71
Jul - Sep	61	56	65	75	70	60	58	90	58	73
Total	**306**	**230**	**274**	**280**	**255**	**311**	**271**	**294**	**297**	**295**

Average Per Quarter: 10-YR: **70.3**

Average Per Quarter This FY: **73.8**

Appendix B

National Type Evaluation Program
Grain Analyzer Sector Summary

2017

All NTEP Sector reports were available to members at the time *NCWM Publication 15* was published. The NTEP Committee is committed to ensuring that electronic versions of sector reports are available with *NCWM Publication 15* in the future. Please note that the sector reports will only be available in the electronic version of *NCWM Publication 15* at http://www.ncwm.net/committees/ntep/sectors/grain-analyzer/archive; they will not be available in the printed versions of *NCWM Publication 15*.

Appendix C

National Type Evaluation Program
Measuring Sector Meeting Summary

2017

All NTEP Sector reports were available to members at the time *NCWM Publication 15* was published. The NTEP Committee is committed to ensuring that electronic versions of sector reports are available with *NCWM Publication 15* in the future. Please note that the sector reports will only be available in the electronic version of *NCWM Publication 15* at http://www.ncwm.net/committees/ntep/sectors/measuring/archive; they will not be available in the printed versions of *NCWM Publication 15*.

Appendix D

National Type Evaluation Program
Software Sector Meeting Summary

2017

All NTEP Sector reports were available to members at the time *NCWM Publication 15* was published. The NTEP Committee is committed to ensuring that electronic versions of sector reports are available with *NCWM Publication 15* in the future. Please note that the sector reports will only be available in the electronic version of *NCWM Publication 15* at http://www.ncwm.net/committees/ntep/sectors/software/archive; they will not be available in the printed versions of *NCWM Publication 15*.

Appendix E

National Type Evaluation Program
Weighing Sector Meeting Summary

2017

All NTEP Sector reports were available to members at the time *NCWM Publication 15* was published. The NTEP Committee is committed to ensuring that electronic versions of sector reports are available with *NCWM Publication 15* in the future. Please note that the sector reports will only be available in the electronic version of *NCWM Publication 15* at http://www.ncwm.net/committees/ntep/sectors/weighing/archive; they will not be available in the printed versions of *NCWM Publication 15*.

Appendix F

National Type Evaluation Program
Multiple Dimension Measuring Devices Work Group Meeting Summary

2017

All NTEP Sector and Work Group reports were available to members at the time *NCWM Publication 15* was published. The NTEP Committee is committed to ensuring that electronic versions of sector reports are available with *NCWM Publication 15* in the future. Please note that the sector reports will only be available in the electronic version of *NCWM Publication 15* at http://www.ncwm.net/committees/ntep/sectors/mdmd/archive; they will not be available in the printed versions of *NCWM Publication 15*.