National Type Evaluation Program (NTEP) Committee 2018 Interim Meeting Report

Ms. Kristin Macey, Committee Chair California

INTRODUCTION

The NTEP Committee (hereinafter referred to as the "Committee") submits this Committee Interim Report for consideration by National Conference on Weights and Measures (NCWM). This report contains the items discussed and actions proposed by the Committee during its Interim Meeting in St. Pete, Florida, January 21-24, 2018. The report will address the items in Table A during the Annual Meeting. Table A identifies the agenda items by reference key, title of item, page number and the appendices by appendix designations. The acronyms for organizations and technical terms used throughout the agenda are identified in Table B.

The NTEP Program is administered by NCWM with input from members of NCWM. NCWM Publication 14, *Administrative Policy* changes are adopted by recommendation of the Committee and a majority vote of the Board of Directors. NCWM Publication 14, *Technical Policy, Checklists, Test Procedures* changes are adopted by recommendation of the NTEP Sectors and a majority vote of the NTEP Committee.

The first three letters of an item's reference key are assigned from the Subject Series List. The status of each item contained in the report is designated as one of the following: **(D) Developing Item:** The Committee determined the item has merit; however, the item was returned to the submitter or other designated party for further development before any action can be taken at the national level; **(A) Assigned Item:** The Committee has assigned development of the item to a recognized subcommittee or task group within NCWM. **(I) Informational Item:** The item is under consideration by the Committee but not proposed for Voting; **(W) Withdrawn Item:** The item has been removed from consideration by the Committee.

The Committee may change the status designation of agenda items (Developing, Assigned, Informational, and Withdrawn) up until the report is adopted. Any change from the Committee Interim Report (as contained in this publication) or from what appears on the addendum sheets will be explained to the attendees prior to a vote of the NTEP Committee or Board of Directors.

An "Item Under Consideration" is a statement of proposal and not necessarily a recommendation of the Committee. 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**. Additional letters, presentations and data may have been part of the Committee's consideration. Please refer to https://www.ncwm.net/meetings/annual/publication-16 to review these documents.

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 if (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 possible, the posting will be done at least a day prior to the planned closed session.

Note: It is policy to use metric units of measurement in 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.

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International	INT Series			
Activity Reports	ACT Series			
Conformity Assessment Program				
NCWM Publication 14, Administrative Policy	ADM Series			
Other Items	OTH Series			

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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 I 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.

INT-2 I 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 February 2018, eighty-seven NTEP certificates for load cells were issued under the MAA. The NTEP Administrator reviewed all MAA 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 Annual Meeting in July 2018.

ACT – ACTIVITY REPORTS

ACT-1 I NTEP Participating Laboratories and Evaluations Reports

Background / Discussion:

The NTEP weighing and measuring laboratories held a joint meeting April 3-5, 2017, in Ottawa, Canada.

The NTEP weighing laboratories also met in August 2017, prior to the NTEP Weighing Sector meeting and the measuring laboratories met in September 2017, prior to the NTEP Measuring Sector meeting in Houston, TX 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 Interim Meeting Meeting the Committee reviewed NTEP statistics through December 2017. 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.

ACT-2 I 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 16-17, 2017 in Kansas City. MO. A draft of the final summary was provided to the Committee prior to the 2018 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 15-16, 2018 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

Fax: (301) 975-8091 Email: <u>diane.lee@nist.gov</u>

NTEP Measuring Sector:

The NTEP Measuring Sector met October 3-4, 2017 in Houston, TX. A draft of the final summary was provided to the Committee prior to the 2018 NCWM Interim Meeting for review and approval. (See Appendix C)

The next meeting of the NTEP Measuring Sector Meeting is scheduled for late September 25-26, 2018 in Baltimore, MD. 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 May 3, 2017 in Columbus, OH. It was a joint meeting with the NTEP MDMD Work Group. A final draft of the meeting summary was provided to the Committee prior to the 2018 NCWM Interim Meeting for review and approval. (See Appendix D)

The next meeting of the NTEP Software Sector is scheduled for August 22-23, 2018 in Louisville, KY. The meeting will be a joint meeting of the NTEP Weighing 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. 1602 Wagner Avenue

Erie, PA 16510 Phone: (814) 898-5250 Fax: (814) 899-3414

Email: jim.pettinato@fmcti.com

NTEP Specialist

Mr. Darrell Flocken **NCWM**

1135 M Street, Suite 110 Lincoln, NE 68508 Phone: (614) 620-6134

Email: darrell.flocken@ncwm.net

NTEP Weighing Sector:

The NTEP Weighing Sector met August 22-23, 2017, in Houston, TX. A final draft of the meeting summary was provided to the Committee prior to the 2018 NCWM Interim Meeting for review and approval. (See Appendix E)

The next NTEP Weighing Sector meeting is scheduled for August 21-22, 2018 in Louisville, KY. Plans are to meet jointly with the NTEP Software Sector at the same location August 22-23, 2018. 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. Rick Harshman NIST, OWM 100 Bureau Drive, MS 2600 Gaithersburg, MD 20899 Phone: (301) 975-8107

Fax: (301) 975-8091

Email: richard.harshman@nist.gov

NTEP Multiple Dimension Measuring Devices (MDMD) Work Group:

The NTEP MDMD Work Group met March 2-3, 2017, in Columbus, OH. The second day of the meeting was a joint meeting with the NTEP Software Sector. A final draft of the meeting summaries was provided to the Committee prior to the 2018 NCWM Interim Meeting for review and approval. (See Appendix F)

The next NTEP MDMD Work Group meeting is scheduled for May 8-9, 2018 in Columbus, OH. For questions on the status of work group or to propose items for a future meeting, please contact Work Group Chair Robert Kennington or NTEP Specialist Darrell Flocken.

Chair

Mr. Robert Kennington Quantronix, Inc. P.O. Box 929 Farmington, UT 84025

Phone: (801) 939-9520

Email: rkennington@cubiscan .com

NTEP Specialist

Mr. Darrell Flocken NCWM

1135 M Street, Suite 110 Lincoln, NE 68508

Phone: (614) 620-6134

Email: darrell.flocken@ncwm.net

The NTEP Committee reviewed and approved all 2017 NTEP Sector and Work Group reports during the 2018 Interim Meeting.

CAP - CONFORMITY ASSESSMENT PROGRAM

CAP-1 I 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 2017 Annual Meeting. As a result of VCAP activities:

- 27 load cell certificates, involving 15 different certificate holders, were changed to "inactive" status.
- 15 weighing/load receiving elements certificates (2000 lb capacity and less, using load cells that are not traceable to their own NTEP certificate), involving 11 different certificate holders, were changed to "inactive" status.
- 7 indicating element certificates, involving 5 different certificate holders (3 manufacturers and 2 private label CC holders) chose to let their CCs go inactive.

Load Cells: Since June 2016 (through June 2017) no CCs were made inactive due to VCAP noncompliance.

- 45 new or amended CCs were issued since June of 2016. Of the 45, only one was the first CC for the manufacturer and that manufacturer had a VCAP audit performed 3 months after the CC issue date.

 $W/LRE \ge 2000$ lb w/non NTEP load cells: Since June 2016 one CC was made inactive due to VCAP noncompliance however, that manufacturer completed their required VCAP audit in January 2017 and the CC was reactivated.

- 10 new CCs, within this VCAP device category, were issued in this time frame. Other than the one mentioned above, all were issued to VCAP compliant manufacturers.
- One manufacturer which previously had their CC for this device type made inactive announced it was in the process of satisfying their VCAP requirements and will reapply for these models once VCAP compliance is completed. (The decision to do this was based on the addition of Complete Scales being added to the list of VCAP devices.)

Indicating Elements: Compliance deadline was June 2016 for manufacturers and December 2016 for private label CC holders.

- Statistics:
- 97 CC holders (manufacturers and private labelers) were in compliance by the deadline.
- 3 manufacturers and 2 private label CC holders chose to let their combined 7 CCs go inactive.
- Two manufacturers and one private label CC holder are currently working to obtain VCAP compliance. The NTEP Specialist is working with all 3 as the auditor.

Complete Scales: This device category has a compliance deadline of June 2018 for manufacturers and December 2018 for private label CC holders.

- 56 new CC holding companies added to VCAP by including complete scales to the VCAP device list.
- 55 are manufacturers
- 1 is a private labeler.

- 11 companies have completed their VCAP audit as of July 1, 2017.
- With the addition of Complete Scales to the VCAP device list, two manufacturers, which had previously let CCs for load cells go inactive, informed NTEP that they are going to comply with VCAP requirements and will reapply to NTEP for new certificates for load cell.

Misc. VCAP Information:

- 1. To date the NTEP Specialist audited 14 companies totaling 17 locations.
- 2. Current audit backlog for the NTEP Specialist is 3 companies.
- 3. The NTEP Specialist will begin performing re-assessment audits (the 3-year cycle schedule) in mid-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:

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. The VCAP process requirement is ongoing for load cells, weighing elements that use non-NTEP load cells and indicating elements. Certificate holders for these device types are required to have an onsite 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 I Timelines for Remaining Device Categories Subject to VCAP

Source: NTEP Committee

Item under Consideration:

NCWM decided to include the four 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 proposed 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.

Complete Scales:

This device type includes, but is not limited to, Computing, Non-computing, Point of Sale, Crane, Monorail, and Grain Test Scales with weighing capacities up to and including 2000 lb. It is important to note that the use of an NTEP certified load cell does not qualify the scale for an exemption to the VCAP requirements.

NCWM/NTEP VCAP Compliance Timeline							
		Complet	e Scales				
Jan 2017-	Jan 2017-	Jan 2017-	Jan 2017-				
March 2017	May 2018	Nov 2018	Dec 2018	Jun 2018	Dec 2018		
NTEP notifies	Parent CC	Private Label CC	NTEP evaluates	NCWM declares	NCWM declares		
active CC	holders to put	holders to put	incoming audit	CCs inactive if	CCs inactive if		
holders of	VCAP QM	VCAP QM system	reports	Parent CC holder	Private Label CC		
VCAP	system in place	in place		fails to comply	holder fails to		
requirements	CC holder to	CC holder to have	NTEP contacts	with VCAP	comply with		
	have audit	audit completed by	CC holders not		VCAP		
	completed by	authorized auditing	meeting VCAP				
	authorized	company	requirements to				
auditing company			encourage				
Submit audit		Submit audit report	compliance				
	report to						
	NCWM/NTEP						

Automatic Weighing Systems:

NCWM/NTEP VCAP Compliance Timeline Automatic Weighing Systems								
July 2017-	July 2017-	July 2017-	July 2017-					
Sept 2017	Nov 2018	May 2019	Jun 2019	Dec 2018	Jun 2019			
NTEP notifies active CC holders of VCAP requirements	Sept 2017Nov 2018May 2019NTEP notifies active CC holders of VCAPParent CC holders to put VCAP QM holders to put VCAP QM system in placePrivate Label CC holders to put VCAP QM system in place		NTEP evaluates incoming audit reports NTEP contacts CC holders not meeting VCAP requirements to encourage compliance	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			

Automatic Bulk Weighing Systems:

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

Belt-Conveyor Scales:

NCWM/NTEP VCAP Compliance Timeline								
		Bulk-Convey	yor Scales					
July 2018-	July 2018-	July 2018-	July 2018-					
Sept 2018	Nov 2019	May 2020	Jun 2020	Dec 2019	Jun 2020			
NTEP notifies active CC holders of VCAP requirements	Parent CC holders to put VCAP QM system in place CC holder to have audit completed by authorized auditing company Submit audit report to NCWM/NTEP	Private Label CC holders to put VCAP QM system in place CC holder to have audit completed by authorized auditing company Submit audit report to NCWM/NTEP	NTEP evaluates incoming audit reports NTEP contacts CC holders not meeting VCAP requirements to encourage compliance	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			

Background / Discussion:

A scale company asked if the Committee had given any thought to expanding the VCAP audit to a five-year period. NTEP Administrative Policy Section 21.1.3.2.16 allows for a five-year cycle under specific conditions. The NTEP Committee has agreed to explore the issue and develop guidelines and recommendations for the certification bodies.

Another scale company requested that NTEP develop a unified spreadsheet for VCAP. The Committee agrees and has directed NTEP to develop the checklist (spreadsheet) for manufacturers and VCAP auditors use.

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.

OTH – OTHER ITEMS

OTH-1 I 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 consisted of seven public sector members and six 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.

The CA Lab is in the process of purchasing EVSE test standards for both laboratory and field testing. For questions on the status of the work group please contact NTEP Administrator Jim Truex at jim.truex@ncwm.net.

OTH-2 I 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. The Committee is requesting additional input from manufactures, NTEP sectors and others from the weights and measures community.

Ms. Kristin Macey, California | NTEP Committee Chair

Mr. James Cassidy, City of Cambridge, Massachusetts | NCWM Chair

Mr. Brett Gurney, Utah | NCWM Chair-Elect

Mr. Kenneth Ramsburg, Maryland | Member

Mr. Craig VanBuren, Michigan | Member

Mr. Jim Truex, NCWM | NTEP Administrator

National Type Evaluation Program Committee

Appendix A NTEP Statistics Report

General NTEP Statistics	Last Year	This Year
	10/01/16 – 9/30/17	10/01/17 – 3/31/18
Total Applications Processed	(25) 297	(8) 181
Applications Completed	320	138
New Certificates Issued	291	132
Active NTEP Certificates		2058

() = Reactivations

Assignments to Labs per Year	10/1/16 – 9/30/17	10/01/17 – 3/31/18
California	22	(1) 10
Canada	4	2
GIPSA-IL	0	0
GIPSA-KC	8	1
Kansas	1	1
Maryland	(1) 33	9
New York	(5) 26	(3)17
NIST Force Group	4	4
North Carolina	10	(1) 4
Ohio	(2) 75	42
Oregon	0	0
NTEP Field	3	(1) 5
NTEP Administrator	119	53
Applications Not Yet Assigned to a Lab		1

() = Reassignments from another lab

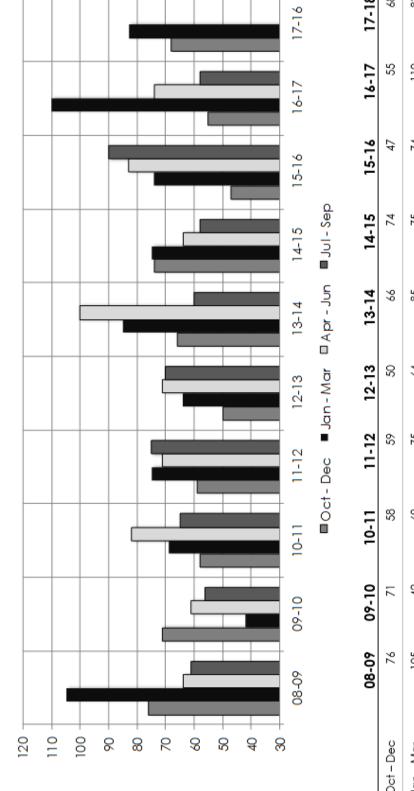
Process Statistics	10/2008 - Present
Average Time to Assign an Evaluation	4.4 Days
Average Time to Complete an Evaluation	84.1 Days

Report on Evaluations in Progress

	0-3	3-6	6-9	9-12	Over 1	
Evaluations in Progress	Months	Months	Months	Months	Year	Total
March 31, 2014	53	23	13	17	11	116
June 30, 2014	55	30	14	8	19	117
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

In Progress by Lab	0-3 Months	3-6 Months	6-9 Months	9-12 Months	Over 1 Year	Total
California	4	3	1			8
Canada	2		1	1		4
GIPSA-IL						
GIPSA-KC	1		3	5	1	10
Kansas		1				1
Maryland	7	1		2	6	16
New York	5	2	1		3	11
NIST Force Group	2	2				4
North Carolina	1					1
Ohio	12	5	1	1		19
Oregon						
NTEP Staff	8	1	1	1	2	13
Unassigned	2					2
				Total	Pending:	89

10-Year Report on Applications Received by Quarter



웄 Oct-Dec Jan – Mar Apr – Jun Jul - Sep Total

Average Per Quarler: 10-YR: Average Per Quarler This FY:

70.2 75.5 NTEP 2017 Interim Meeting Report Appendix A – NTEP Statistics

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*.