Report of the National Type Evaluation Program (NTEP) Committee

Mr. Jerry Buendel, Chairman Washington

5000 INTRODUCTION

This is the report of the NTEP Committee (hereinafter referred to as the "Committee") for the 102^{nd} Annual Meeting of the National Conference on Weights and Measures (NCWM). This report is based on the Interim Report offered in the NCWM Publication 16, testimony heard at public hearings, comments received from the regional weights and measures associations and other parties, the addendum sheets issued at the Annual Meeting, and actions taken by the membership at the voting session of the Annual Meeting. The informational items presented below were adopted as presented when the Committee's report was approved.

Table A identifies the agenda items and appendix items. The agenda items in the Report are identified by Reference Key Number, title, 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 first four digits of the Reference Key Numbers of the items 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; Informational (I) Item: the item is under consideration by the Committee but not proposed for Voting; (V) Voting Item: the Committee is making recommendations requiring a vote by the active members of NCWM; (W) Withdrawn Item: the item has been removed from consideration by the Committee.

Table C provides a summary of the results of the voting on the Committee's items and the report in its entirety. Some Voting Items are considered individually; others may be grouped in a consent calendar. Consent calendar items are Voting Items that the Committee has assembled as a single Voting Item during their deliberation after the Open Hearings on the assumption that the items are without opposition and will not require discussion. The Voting Items that have been grouped into consent calendar items will be listed on the addendum sheets. Prior to adoption of the consent calendar, the Committee entertains any requests from the floor to remove specific items from the consent calendar to be discussed and voted upon individually.

Proposed revisions to the handbook(s) are shown as follows: 1) deleted language is indicated with a **bold face font using strikeouts** (e.g., **this report**), 2) proposed new language is indicated with an **underscored bold-faced font** (e.g., **new items**), and 3) nonretroactive items are identified in *italics*. When used in this report, the term "weight" means "mass."

Note: The policy of NIST is to use metric units of measurement in all 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 U.S. customary units.

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Table B Glossary of Acronyms and Terms

| Acronym | Term | Acronym | Term |
|---------|--|---------|--|
| CC | Certificate of Conformance | NISA | National Industrial Scale Association |
| 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 | OWM | Office of Weights and Measures |
| MC | Measurement Canada | R | Recommendation |
| MDMD | Multiple Dimension Measuring Devices | USNWG | U.S. National Work Group |
| MRA | Mutual Recognition Arrangement | VCAP | Verification Conformity Assessment Program |
| NCWM | National Conference on Weights and Measures | WG | Work Group |

Table C Summary of Voting Results

| Reference Key | House of Senate Representatives | | House of Delegates | | D 14- |
|----------------------|---------------------------------|-------|--------------------|------|---------|
| Number | Yeas | Nays | Yeas | Nays | Results |
| To Accept the Report | | Voice | Vote | | Adopted |

Details of All Items

(In order by Reference Key)

5100 INTERNATIONAL

5100-1 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 26, 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 the continuation of the 22-year beneficial partnership. The new MRA will be effective for five 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, that is, 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 and expand the arrangement.

5100-2 I MUTUAL ACCEPTANCE ARRANGEMENT (MAA)

Background/Discussion:

Information regarding the International Organization of Legal Metrology (OIML) MAA can be found at **www.oiml.org/maa.** NCWM has signed the OIML MAA Declaration of Mutual Confidence (DoMC) for Recommendation (R) 60 Load Cells as a Utilizing Participant. A Utilizing Participant is a participant that does not

issue any OIML Certificate of Conformance (CC) nor OIML Test Reports and/or Test Reports under a DoMC but does utilize the reports issued by issuing participants.

The U.S. (NTEP) supported the OIML B 10 documents for the MAA with the provision that the use of manufacturer test data was clearly identified on the MAA test report because NTEP cannot use manufacturer test data towards issuance of an NTEP certificate. Consequently, the CIML voted and approved the Amendment to B 10 to allow the inclusion of test data from manufacturers, on a strictly voluntary basis, at its October 2012 meeting in Bucharest, Romania. Dr. Chuck Ehrlich, National Institute of Standards and Technology (NIST), Office of Weights and Measures (OWM), gave an update to the Committee reviewing the history of the above discussions, deliberations, and CIML votes, confirming that the outcomes aligned 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 MAA policy regarding participation in R 76. The NCWM Board recapped the decision process to participate as a Utilizing Participant for R 60. Existing policy from 2006 is not to participate in R 76 until NCWM can do so as an Issuing Participant. 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 Participant, then it should consider becoming a Utilizing Participant for OIML R 76. Some U.S. manufacturers support the NCWM policy, but others would like to have one-stop shopping. The MAA also includes R 49 (water meters), and R 117 (RMFD) may be added. Since there are no new developments to affect the decision, the NCWM Board of Directors agreed to maintain the existing policy at this time.

From January 2011 to March 2017, 64 NTEP certificates for load cells were issued under the MAA. The NTEP Administrator reviewed all MAA test data and drafted the NTEP certificates. Because of the more recent 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 presented to the CIML and approved at the 2016 CIML Meeting (in Strasbourg, France). On this basis, an OIML-CS Preliminary Management Committee (PrMC) has been formed, which will continue the work of developing additional OIML-CS documents. Dr. Ehrlich will represent the United States on the PrMC, with anticipated assistance from NCWM/NTEP (Mr. Jim Truex and Mr. Darrell Flocken). The first PrMC meeting is tentatively scheduled for February 2017. It is anticipated that the OIML-CS will go into effect in January 2018, but until then the MAA will remain operational.

A meeting of the MAA Committee on Participation Review (CPR) for R 60 and R 76 was held on March 22 and 23, 2016, in Denmark. Dr. Chuck Ehrlich, NIST, OWM, Mr. John Barton, NIST, OWM; and Mr. Darrell Flocken, NCWM attended the meeting. Another CPR meeting might be held in 2017, but this might be cancelled and instead the work subsumed into the OIML-CS work.

Dr. Ehrlich represented the U.S. interests in this work and will update the Board at the NCWM Annual Meeting in July 2017 in Pittsburgh, Pennsylvania.

5200 ACTIVITY REPORTS

5200-1 I NTEP PARTICIPATING LABORATORIES AND EVALUATIONS REPORTS

Background/Discussion:

The NTEP weighing and measuring laboratories held a joint meeting March 28 - 30, 2017, in Annapolis, Maryland.

The NTEP weighing laboratories also met in August 2016 prior to the NTEP Weighing Sector meeting and the measuring laboratories met in September prior to the NTEP Measuring Sector meeting in Denver, Colorado, 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 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 2017 Interim Meeting, the Committee reviewed NTEP statistics through December 2016. The review of statistics shows incoming applications are relatively comparable to normal, and there exist no significant laboratory backlog issues.

5200-2 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 (BCS) Sector:

The NTEP Belt-Conveyor Scale Sector met February 23, 2016, in Pittsburgh, Pennsylvania. A final draft of the meeting summary was provided to the Committee prior to the 2017 NCWM Interim Meeting for review and approval (See Appendix B.)

The National Weighing and Sampling Association (NW&SA) has dissolved and rejoined with National Industrial Scale Association (NISA). The BCS USNWG and BCS Sector had been meeting simultaneously with the NW&SA for several years. The next meeting of NISA is scheduled for October 22 - 24, 2017, in Memphis, Tennessee. Resent contact with sector Chair, Peter Sirrico (Thayer Scale), and Technical Advisor, Mr. John Barton (NIST, OWM), leads us to believe that an NTEP BCS Sector meeting may not be necessary this year due to a lack of NCWM Publication 14 agenda items. Sector members will be notified if the situation changes. 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

E-mail: john.barton@nist.gov

NTEP Grain Moisture Meter and NIR Protein Analyzer Sectors:

The NTEP Grain Analyzer Sector met September 13 - 14, 2016, in Kansas City, Missouri. The second day was a joint meeting with the NTEP Software Sector (SS). A draft of the final summary was provided to the Committee prior to the 2017 NCWM Interim Meeting for review and approval. (See Appendix C.)

The next meeting of the NTEP Grain Moisture Meter and NIR Protein Analyzer Sectors is scheduled for August 16 - 17, 2017, in Kansas City, Missouri. For questions on the status of sector work or to propose items for a future meeting, please contact the Technical Advisor:

NTEP Measuring Sector (MS):

The NTEP MS met September 20 - 21, 2016, in Denver, Colorado. A draft of the final summary was provided to the Committee prior to the 2017 NCWM Interim Meeting for review and approval. (See Appendix D.)

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The next meeting of the NTEP MS is scheduled for October 3 - 4, 2017, in Houston, Texas. 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

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NTEP Software Sector (SS):

The NTEP SS met September 14, 2016, in Denver, Colorado. It was a joint meeting with the NTEP Grain Analyzer Sector. A final draft of the meeting summary was provided to the Committee prior to the 2017 NCWM Interim Meeting for review and approval. (See Appendix E.)

The next meeting of the NTEP SS is scheduled for May 3, 2017, in Columbus, Ohio. The meeting will be a joint meeting of the NTEP Multiple Dimension Measuring Device (MDMD) WG and SS. 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

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NTEP Weighing Sector (WS):

The NTEP WS met August 23 - 24, 2016, in Denver, Colorado. A final draft of the meeting summary was provided to the Committee prior to the 2017 NCWM Interim Meeting for review and approval. (See Appendix F.)

The next NTEP WS meeting is scheduled for August 22 - 23, 2017, in Houston, Texas. 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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NTEP Multiple Dimension Measuring Devices (MDMD) Work Group:

The NTEP MDMD Work Group met April 26 - 27, 2016, in Reynoldsburg, Ohio. A final draft of the meeting summaries was provided to the Committee prior to the 2017 NCWM Interim Meeting for review and approval. (See Appendix G.)

The next NTEP MDMD WG meeting is scheduled for March 2 - 3, 2017, in Columbus, Ohio. For questions on the status of WG or to propose items for a future meeting, please contact WG Chair, Robert Kennington, or NTEP Specialist Darrell Flocken.

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The NTEP Committee reviewed and approved all 2016 NTEP Sector and WGreports during the 2017 Interim Meeting.

5300 CONFORMITY ASSESSMENT PROGRAM

5300-1 I CONFORMITY ASSESSMENT PROGRAM (CAP)

Background/Discussion:

The CAP 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 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 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.

During the 2014 Annual Meeting, NTEP acknowledged that the regulators have not bought into the IV report form. Industry representatives said that IV is very important to ensure conformity assessment and the NCWM should push harder for reporting of non-compliance issues found during IV.

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.

The Committee was given updated VCAP statistics during the 2016 Annual Meeting. As a result of VCAP activities, 27 load cell certificates, involving 15 different certificate holders, were changed to "inactive" status. As a result of VCAP activities for weighing/load receiving elements 2000 lb capacity and less using load cells not traceable to their own NTEP certificate, 15 certificates, involving 11 different certificate holders, were changed to "inactive" status.

The Committee had discussions about the required number of audits for facilities manufacturing 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 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 October 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 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 three 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 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 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 Committee decided during the 2014 Annual Meeting to include indicating elements and approved developed timeline below.

| NCWM/NTEP VCAP Compliance Timeline Indicating Elements | | | | | | | |
|---|---|--|--|--|---|--|--|
| Jan 2015– March 2015 | Jan 2015- May 2016 | Jan 2015- Nov 2016 | Jan 2015- Dec 2016 | Jun 2016 | Dec 2016 | | |
| 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 | NCWM declares CCs inactive if Private Label CC holder fails to | | |
| | CC holder to have audit conducted by Certified Body | CC holder to have audit conducted by Certified Body | NTEP contacts CC holders not meeting VCAP requirements to | holder fails to comply with VCAP | comply with VCAP | | |
| | Submit audit report to NCWM/NTEP | Submit audit report to NCWM/NTEP | encourage compliance | | | | |

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 timeline. 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.

The Committee was given the following update VCAP compliance statistics (through June 2017).

- Load Cells: Since June 2016 no CCs were made inactive due to VCAP noncompliance.
 - Forty-five new or amended CCs were issued since June 2016. Of the 45, only one was the first CC for the manufacturer and the manufacturer had a VCAP audit performed three months after the CC issue date.
- W/LRE ≥ 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.
 - Ten 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 would 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:
 - o Ninety-seven CC holders (manufacturers and private labelers) complied by the deadline.
 - Three manufacturers and two private label CC holders chose to let their combined seven CCs go inactive.
 - o Two manufacturers and one private label CC holder are currently working to obtain VCAP compliance. The NTEP Specialist is working with all three 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.
 - Fifty-six new CC holding companies added to VCAP by including complete scales to the VCAP device list.
 - o Fifty-five are manufacturers
 - o One is a private labeler.
 - Eleven 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 three companies.

The NTEP Specialist will begin performing re-assessment audits (the three-year cycle schedule) in mid-2018.

5300-2 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 practical. 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 plans to move forward with the following timelines.

Background/Discussion:

During the 2016 Interim Meeting, 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 Complete Scales | | | | | | | |
|---|--|---|---|--|--|--|--|
| Jan 2017– March 2017 | Jan 2017- May 2018 | Jan 2017- Nov 2018 | Jan 2017- Dec 2018 | Jun 2018 | Dec 2018 | | |
| NTEP notifies active CC holders of VCAP | 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 | NCWM declares CCs inactive if Private Label | | |
| requirements | 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 | holder fails to comply with VCAP | CC holder fails to comply with VCAP | | |
| | Submit audit report to NCWM/NTEP | Submit audit report to NCWM/NTEP | | | | | |

Automatic Weighing Systems:

| NCWM/NTEP VCAP Compliance Timeline Automatic Weighing Systems | | | | | | | | |
|---|--|---|--|--|--|--|--|--|
| July 2017– Sept 2017 | July 2017- Nov 2018 | July 2017- May 2019 | July 2017- Jun 2019 | Dec 2018 | Jun 2019 | | | |
| NTEP notifies active CC holders of VCAP | 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 | NCWM declares CCs inactive if Private Label | | | |
| requirements | 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 | holder fails to comply with VCAP | CC holder fails to comply with VCAP | | | |
| | Submit audit report to NCWM/NTEP | Submit audit report to NCWM/NTEP | compliance | | | | | |

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 | 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 | | |
| requirements | 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 | | | | |
| | Submit audit report to NCWM/NTEP | Submit audit report to NCWM/NTEP | compliance | | | | |

Belt-Conveyor Scales:

| NCWM/NTEP VCAP Compliance Timeline Bulk-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 | 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 | NCWM declares CCs inactive if Private Label | | |
| requirements | 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 | holder fails to comply with VCAP | CC holder fails to comply with VCAP | | |
| | Submit audit report to NCWM/NTEP | Submit audit report to NCWM/NTEP | compliance | | | | |

Background/Discussion:

During the 2016 Annual Meeting, a scale company asked if the Committee had given any thought to expanding the VCAP audit to a five-year period. The 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 agreed 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 that 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.

5500 OTHER ITEMS – DEVELOPING ITEMS

5500-1 I ELECTRONIC VEHICLE FUELING SYSTEMS (EVFS)

Source:

 $\textbf{California Division of Measurement Standards \&\ NTEP\ Measuring\ Laboratories\ Item\ under\ Consideration:}$

Work with U.S. National Work Group Representatives and other experts to develop an NTEP checklist for electronic vehicle supply equipment (EVSE). Consider establishing an NCWM Work Group or Task Force to complete the project in a timely manner.

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 NIST 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 Publication 14 checklist format. Another prime issue, which 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 NCWM Publication 14 checklist for RMFDs would be a good starting point to use in drafting a NCWM Publication 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 (WG) 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 WG. The NTEP EVSE WG was developed with Mr. Andrei Moldoveanu, Senior Program Manager for NEMA, appointed as Chair. The WG consists of seven public sector members and six private sector members representing the associate membership.

THE NTEP EVSE WG had their kick-off web based meeting March 14, 2017. The WG plans monthly web meetings with the initial goal of having a draft checklist ready for NCWM Board/NTEP Committee review this fall. For questions on the status of the WG please contact NTEP Administrator, Jim Truex, at **jim.truex@ncwm.net**.

National Type Evaluation Program Committee

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Ms. Kristen Macey, California | NCWM Chair

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

Mr. Kenneth Ramsburg, Maryland | Member

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