

National Type Evaluation Program (NTEP) Committee 2021 Interim Meeting Agenda

Mr. Craig VanBuren, Committee Chair
Michigan

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 Program (NTEP) 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 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 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

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

**Table A
Table of Contents**

	Reference Key	Title of Item	NTEP Page
1	INT – INTERNATIONAL		275
2	INT-1	Mutual Recognition Arrangement (MRA).....	275
3	INT-2	OIML-Certification System (CS)	276
4	ACT – ACTIVITY REPORTS		276
5	ACT-1	NTEP Participating Laboratories and Evaluations Reports	276
6	ACT-2	NTEP Sector Reports.....	277
7	CAP – CONFORMITY ASSESSMENT PROGRAM		279
8	CAP-1	Conformity Assessment Program	279
9	CAP-2	Timelines for Remaining Device Categories Subject to VCAP	280
10	ADM – NCWM PUBLICATION 14, ADMINISTRATIVE POLICY		281
11	ADM-21.1	Add Multiple Dimensioning Measuring Devices (MDMD) and Grain Analyzers to VCAP	
12		Device List.....	281
13	ADM-2	Change VCAP Audit Frequency in Sections 3.2.16. and 3.7.10.	281
14	ADM-21.2	Correction to VCAP Policy to add NCWM Technical Employee Responsibilities to the	
15		Paragraphs 21.3.8., 21.3.8.2., and 21.3.8.3.	283
16	ADM-21.3	Enhance VCAP Policy to Require 2 nd Party Auditors to be Certified By NTEP.....	283
17	ADM-21.4	Update reference to auditors accreditation to ISO 9001:2018	284
18	ADM-21.5	Expand VCAP to Include Devices That do not Require Influence Factor Testing during the	
19		NTEP Certification Evaluation	284
20	OTH – OTHER ITEMS		287
21	OTH-1	Electronic Vehicle Fueling Systems (EVFS).....	287

Appendices

A NTEP Statistics Report.....	A289
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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)

1 **INT – INTERNATIONAL**

2 **INT-1 Mutual Recognition Arrangement (MRA)**

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

8 **The scope of the current MRA includes:**

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

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

21 The current agreement expires on July 26, 2021.

1 **INT-2 OIML-Certification System (CS)**

2 Implementation of the (new) International Organization of Legal Metrology – Certification System (OIML-CS)
3 officially began in January 2018, replacing the previous OIML MAA and basic certificate systems. NCWM signed
4 the OIML MAA Declaration of Mutual Confidence (DoMC) for Recommendation (R) 60 “Load Cells” as a Utilizing
5 Participant in 2006 and NCWM signed the OIML-CS Utilizer Declaration for R 60 in January 2018. A Utilizer is a
6 participant in the system that does not issue any OIML Certificates of Conformance (CC) or OIML Test Reports but
7 does utilize the reports issued by OIML-CS Issuing Authorities and Authorized Testing Laboratories.

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

14 Dr. Ehrlich has requested, on multiple occasions, that NCWM review its policy regarding participation in the OIML-
15 CS (and previously participation in the OIML-MAA) for R76 (Non-Automatic Weighing Instruments). The NCWM
16 has continued to follow a policy that was established in 2006 to not participate in R76 until NCWM can do so as an
17 Issuing Authority. In 2016, the Board revisited the 2006 discussions leading to that decision, including considerations
18 for NTEP labs’ workload, potential lost expertise, concerns with quality of evaluations at some foreign labs, etc. Since
19 there were no new developments to affect its decision, the NCWM Board of Directors agreed to maintain existing
20 policy. Dr. Ehrlich suggested that if there was no possibility in sight that the NCWM could become an Issuing
21 Authority, then it should consider becoming a Utilizer for OIML R76 under the OIML-CS. Some U.S. manufacturers
22 support current NCWM policy on this, but others would prefer a change.

23 The OIML-CS now includes 37 categories of measuring instruments under what is called “Scheme A”, where
24 accreditation or peer review is required of the Issuing Authority and its Test Labs. In addition to R60 and R76, some
25 the instruments and systems in the OIML-CS that are probably of the most interest to NCWM members include:
26 OIML R21 (Taximeters), R46 (Active Electrical Energy Meters), R49 (Water meters), R51 (Automatic catch-
27 weighers), R59 (Moisture meters for cereal grains and oilseeds), R61 (Automatic gravimetric filling instruments), R85
28 (Level gauges for stationary storage tanks), R106 (Automatic rail-weighbridges), R117 (fuel dispensers and other
29 liquid flow systems), OIML R129 (Multi-dimensional measuring instruments), and R137 (Gas meters).

30 Information regarding the OIML-CS can be found at www.oiml.org. Dr. Ehrlich represents the U.S. interests in this
31 work and regularly provides updates to the Board on these activities.

32 **ACT – ACTIVITY REPORTS**

33 **ACT-1 NTEP Participating Laboratories and Evaluations Reports**

34 The NTEP weighing laboratories held a video conference meeting on July 23, 2020. The measuring laboratories held
35 a video conference meeting on August 26, 2020 .

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

41 During the 2020 Annual Meeting the Committee reviewed NTEP statistics through September 2020. The review of
42 statistics shows that incoming applications are relatively comparable to normal and there exist no significant laboratory
43 backlog issues. See Appendix A for NTEP statistics.

1 The 2021 meeting of the NTEP Participating Laboratories is scheduled for March 2021 in Annapolis, MD.

2 **ACT-2 NTEP Sector Reports**

3 All NTEP Sector Reports are available to members at the time *NCWM Publication 15* is published. The NTEP
4 Committee is committed to ensuring electronic versions of sector reports are available with *NCWM Publication 15*.
5 Please note the sector summary reports will only be available in the electronic version of *NCWM Publication 15* and
6 at www.ncwm.com/interim-archive; they will not be available in printed versions of *NCWM Publication 15*.

7 **NTEP Belt-Conveyor Scale Sector:**

8 The NTEP Belt-Conveyor Scale Sector did not meet in 2020, however; all members of the sector did participate in a
9 meeting of the Belt-Conveyor Scale Task Group hosted by John Barton on May 28, 2020. For minutes of the Task
10 Group Meeting, please contact John Barton, NIST, OWM.

11 The next meeting of the NTEP Belt-Conveyor Scale Sector will be held in conjunction with the 2021 Weighing Sector
12 Meeting scheduled for August 17-18, 2021 with the location to be determined. For questions on the status of sector
13 work or to propose items for a future meeting. For questions on the status of sector work or to propose items for a
14 future meeting, please contact the sector Chair and/or the NTEP Administrator:

Mr. Peter Sirrico
Thayer / Hyer Industries
psirrico@thayerscale.com

Mr. Darrell Flocken
NTEP Administrator
614-620-6134, darrell.flocken@ncwm.com

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16 **NTEP Grain Moisture Meter and NIR Protein Analyzer Sectors:**

17 The NTEP Grain Analyzer Sector held a video meeting on August 11, 2020. A draft of the final summary was
18 provided to the Committee prior to the 2021 NCWM Interim Meeting for review and approval. Please note the sector
19 summary report will only be available in the electronic version of *NCWM Publication 15* and at
20 www.ncwm.com/grain-sector; they will not be available in printed versions of *NCWM Publication 15*.

21 The next meeting of the NTEP Grain Moisture Meter and NIR Protein Analyzer Sectors is scheduled for
22 August 10, 2021 in Kansas City, MO. For questions on the status of sector work or to propose items for a future
23 meeting, please contact the sector Chair and/or the NTEP Administrator:

Mr. Karl Cunningham
Illinois
karl.cunningham@illinois.gov

Mr. Darrell Flocken
NTEP Administrator
614-620-6134, darrell.flocken@ncwm.com

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25 **NTEP Measuring Sector:**

26 The NTEP Measuring Sector held a video meeting on September 22-23, 2020. A draft of the final summary was
27 provided to the Committee prior to the 2021 NCWM Interim Meeting for review and approval. Please note the sector
28 summary report will only be available in the electronic version of *NCWM Publication 15* and at [www.ncwm.com/ntep-](http://www.ncwm.com/ntep-measuring-sector)
29 [measuring-sector](http://www.ncwm.com/ntep-measuring-sector); they will not be available in printed versions of *NCWM Publication 15*.

30 The next meeting of the NTEP Measuring Sector Meeting is scheduled for late September 21-22, 2021 with the
31 location to be determined. For questions on the status of sector work or to propose items for a future meeting, please
32 contact the sector Chair and/or the NTEP Administrator:

Mr. Michael Keilty
Endress + Hauser Flowtec AG, USA
michael.keilty@us.endress.com

Mr. Darrell Flocken
NTEP Administrator
614-620-6134, darrell.flocken@ncwm.com

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1 **NTEP Software Sector:**

2 The NTEP Software Sector held a video meeting on August 12, 2020. It was a joint meeting with the NTEP Measuring
3 Sector. A final draft of the meeting summary was provided to the Committee prior to the 2021 NCWM Interim Meeting
4 for review and approval. Please note that the sector summary report will only be available in the electronic version of
5 *NCWM Publication 15* and at www.ncwm.com/software-sector; copies will not be available in the printed versions
6 of *NCWM Publication 15*.

7 The next meeting of the NTEP Software Sector is scheduled for May 5-6, 2021 in Columbus, OH. The meeting will
8 be a joint meeting of the Software Sector and the Multiple Dimensioning Measuring Device Work Group. For
9 questions on the status of sector work or to propose items for a future meeting, please contact the sector Chair and/or
10 the NTEP Administrator:

Mr. James Pettinato
Technip FMC
jim.pettinato@technipfmc.com

Mr. Darrell Flocken
NTEP Administrator
614-620-6134, darrell.flocken@ncwm.com

11 **NTEP Weighing Sector:**

12 The NTEP Weighing Sector held a video meeting on August 18, 2020. A final draft of the meeting summary was
13 provided to the Committee prior to the 2021 NCWM Interim Meeting for review and approval. Please note that the
14 sector summary report will only be available in the electronic version of *NCWM Publication 15* and at
15 www.ncwm.com/weighing-sector; they will not be available in printed versions of *NCWM Publication 15*.

16 The next NTEP Weighing Sector meeting is scheduled for August 17-18, 2021 with the location to be determined.
17 For questions on the status of sector work or to propose items for a future meeting, please contact the sector Chair
18 and/or the NTEP Administrator:

Mr. Rob Upright
VPG Transducers
rob.upright@vishaypg.com

Mr. Darrell Flocken
NTEP Administrator
614-620-6134, darrell.flocken@ncwm.com

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20 **NTEP Multiple Dimension Measuring Devices (MDMD) Work Group:**

21 The NTEP MDMD Work Group did not meet in 2020.

22 The next NTEP MDMD Work Group meeting is scheduled for May 4-5, 2021 in Columbus, OH. This meeting will
23 be held in conjunction with the Software Sector Meeting scheduled for May 5-6, 2021 at the same location. For
24 questions on the status of work group or to propose items for a future meeting, please contact Work Group Chair
25 Chris Senneff or NTEP Administrator, Darrell Flocken.

Mr. Chris Senneff
Rice Lake Weighing Systems
csenneff@ricelake.com

Mr. Darrell Flocken
NTEP Administrator
614-620-6134, darrell.flocken@ncwm.com

26 The NTEP Committee is scheduled to review and approve all 2020 NTEP Sector and Work Group reports, for those
27 sectors and work groups that met in 2020, during the 2021 Interim Meeting.

1 **CAP – CONFORMITY ASSESSMENT PROGRAM**

2 **CAP-1 Conformity Assessment Program**

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

8 **Certificate Review:**

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

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

17 **Initial Verification (IV):**

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

20 An IV report form was developed several years ago. The Committee desired a simple form, perhaps web-based for
 21 use by state and local regulators. The form was approved by the Committee and distributed to the states. A completed
 22 form can be submitted via mail, e-mail, fax, or online. The forms are available on the Conformity Assessment Program
 23 web page at www.ncwm.com/conformity-assessment, or on the Forms web page at www.ncwm.com/helpful-forms,
 24 or by contacting the NCWM at info@ncwm.com or the NTEP Administrator at darrell.flocken@ncwm.com.

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

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

30 **VCAP:**

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

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

41 The Committee has received letters, questions, and many other inquiries pertaining to VCAP. The Committee has
 42 worked diligently to answer the questions submitted in a very timely manner. The Committee knows that additional
 43 questions will be posed as VCAP progresses. Certificate holders and other interested parties are encouraged to submit
 44 written questions to the NTEP Committee. The Committee is pleased to report that it has been successful in answering

1 all the questions to date. Clerical changes and additions have been made to affected VCAP documents as deemed
 2 necessary.

3 Load cells traceable to NTEP certificates were selected for the initial assessment effort. NCWM elected to require a
 4 systems audit checklist that is to be completed by an outside auditor and submitted to NCWM per Section 21.3.3.3.5
 5 of the VCAP requirements. A VCAP Systems Audit Checklist for Manufacturers and a VCAP Systems Audit
 6 Checklist for Private Label Certificate Holders have been developed and are available on the website at
 7 www.ncwm.com/vcap. Additionally, the Committee developed a new *NCWM Publication 14*, administrative policy
 8 to distinguish between the requirements for parent NTEP certificate holders (21.3.2) and private label certificate
 9 holders. The requirements in 21.3.3.7 track the private label checklist requirements: traceability of the private label
 10 NTEP CC to its parent NTEP CC, traceability of the parent NTEP CC to a VCAP audit, purchase and sales records,
 11 plan to report non-conforming product and non-conforming product in stock, plan to conduct internal audits to verify
 12 non-compliance action, and internal audit records.

13 **VCAP Audits:**

14 The Committee had discussions about the required number of audits for facilities that manufacture multiple device
 15 types. For example, if a company had successful audits for two device types, they might submit a request for a delay
 16 from audit requirements for remaining device types, stating that they are all subjected to the same processes and will
 17 be audited in the next cycle. The Committee agreed to the request in principal and directed the NTEP Administrator
 18 proposed a change to the VCAP Policy language. This change was adopted by the NCWM Board in 2013.

19 **CAP-2 Timelines for Remaining Device Categories Subject to VCAP**

20 **Source:**

21 NTEP Committee

22 **Item Under Consideration:**

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

29 The one remaining device that has not reached the end of its compliance deadline is Belt-Conveyor Scale. The timeline
 30 for this device is shown below:

NCWM/NTEP VCAP Compliance Timeline					
Belt-Conveyor Scales (weigh-belt systems only)					
July 2020 - Sept. 2020	July 2020 - Nov. 2021	July 2020 - May 2022	July 2020 - June 2022	Dec. 2021	June 2022
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			

1 Additional comments from affected stakeholders are welcomed and appreciated.

2 **ADM – NCWM PUBLICATION 14, ADMINISTRATIVE POLICY**

3 **ADM-21.1 Add Multiple Dimensioning Measuring Devices (MDMD) and Grain Analyzers**
4 **to VCAP Device List**

5 **Source:**
6 NTEP Administrator

7 **Purpose:**
8 Add MDMD and Grain Analyzers to the current list of device types that require VCAP compliance.

9 **Item Under Consideration:**
10 Modification of Publication 14, Administrative Policy, paragraphs 21.3.1. and paragraph 21.3.6. as shown below.

11 **21.3.1. Devices that Must Meet this Requirement are Limited to the List Below:**

- 12 Load Cell (T.N.8.)
- 13 Indicating Elements (T.N.8.)
- 14 Weighing/Load Receiving Elements 2000 lb capacity and less with non-NTEP Load Cells (T.N.8.)
- 15 Complete Scales 2000 lb capacity and less (T.N.8.)
- 16 Automatic Weighing Systems 2000 lb capacity and less (T.7.)
- 17 Belt-Conveyor Scales (weigh-belt systems only) 2000 lb capacity and less (T.3)
- 18 Automatic Bulk Weighing Systems 2000 lb capacity and less (T.7.)
- 19 **Multiple Dimensioning Measuring Devices (T.5.)**
- 20 **Grain Analyzers (T.N.8.)**

21 **21.3.6. Devices that Must Meet this Requirement are Limited to the List Below:**

- 22 Load Cell (T.N.8.)
- 23 Indicating Elements (T.N.8.)
- 24 Weighing/Load Receiving Elements 2000 lb capacity and less with non-NTEP Load Cells (T.N.8.)
- 25 Complete Scales 2000 lb capacity and less (T.N.8.)
- 26 Automatic Weighing Systems 2000 lb capacity and less (T.7.)
- 27 Belt-Conveyor Scales (weigh-belt systems only) 2000 lb capacity and less (T.3)
- 28 Automatic Bulk Weighing Systems 2000 lb capacity and less (T.7.)
- 29 **Multiple Dimensioning Measuring Devices (T.5.)**
- 30 **Grain Analyzers (T.N.8.)**

31 The addition of MDMD and Grain Analyzers to the current list of devices is consistent with the scope of the VCAP
32 Policy, that being, all devices that require influence factor testing during the NTEP evaluation and certification
33 process are subject to VCAP Policy requirements.

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

35 **Source:**
36 Scale Manufacturers Association (SMA)

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

40 **Item Under Consideration:**
41 Amend NCWM Publication 14, Administrative Policy, Section 21.3.2.16. NTEP VCAP Procedures as follows:

1 3.2.16. ~~Subsequent audits will be held on-site to verify conformance to these standards. Subsequent audits will~~
2 ~~be conducted every three years until objective evidence is obtained to move to a maximum of every five~~
3 ~~years.~~

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

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

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

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

16 3.7.10. ~~Surveillance audits for VCAP conducted by an outside auditor representing a certification every three~~
17 ~~years until objective evidence is obtained to move to a maximum of every five years.~~

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

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

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

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

32 During the 2019 NCWM Interim Meeting in Charleston, SC. The changes suggested by the NTEP Administration
33 was presented for comments. During the Open Hearing, no support for the suggested changes was heard. The
34 Committee heard comments that suggested change eliminated the possibility to change auditing firms during a 3-year
35 period. The Committee hear a proposal from Mr. Eric Golden suggesting the extended audit frequency to a simpler
36 requirement based on the number of previous external audits. This suggestion grew into the revised proposal shown
37 above.

38 During the November 2019 Board of Directors and NTEP Committee Meeting, the NTEP Committee discussed this
39 item and felt that additional work is needed. The Committee also felt that this item should be linked to a new item
40 dealing with the certification of 2nd party auditing firms or individual. The NTEP Administrator was assigned the
41 responsibility of developing a proposal to implement a certification plan.

42 During the opening hearings of the 2020 Interim Meeting, the committee was reminded that the possibility to extend
43 the audit frequency to 5 years was already in the VCAP Policy, however; no criteria was included to identify when
44 the switch to a 5-year frequency was possible. During the Committee Work Session, the members discussed the idea

1 of separating the discussion of the certification of 2nd party auditing firms or individual and keep this item focused on
2 the audit frequency. During their March 2020 NTEP Committee Meeting, the Committee will be presented with the
3 current proposal along with the amended wording offered by Mr. Eric Golden (Cardinal Scale Manufacturing
4 Company). From this discussion, the item will be updated and presented for comments during the NCWM 2020
5 Annual Meeting. A new proposal will be developed and included the March 2020 Meeting agenda regarding the
6 certification of 2nd party auditing firms or individuals.

7 **ADM-21.2 Correction to VCAP Policy to add NCWM Technical Employee Responsibilities**
8 **to the Paragraphs 21.3.8., 21.3.8.2., and 21.3.8.3.**

9 **Source:**
10 NTEP Administrator

11 **Purpose:**
12 Recognize an NCWM technical employee as a VCAP auditor and define their responsibilities for private labeler audits
13 as currently recognized in for manufacturers audits.

14 **Item Under Consideration:**
15 Amend Administrative Policy paragraphs 21.1.3.8., 21.1.3.8.2., and 21.1.3.8.3., as shown below, to be consistent
16 with paragraphs 21.1.3.3., 21.1.3.3.4., and 21.1.3.3.5.

- 17
- 18 **21.1.3.8 Certification Body’s Responsibilities and NCWM Technical Employee Responsibilities:**
- 19 21.1.3.8.1 The selected Certification Body (auditor) shall be accredited to the ISO 9001:2008
20 standard for providing audits and certifications of management systems.
 - 21 21.1.3.8.2 The Certification Body or NCWM technical employee is required to notify NCWM
22 when a major breakdown of the NTEP private label CC holder’s VCAP program is
23 found.
 - 24 21.1.3.8.3 The Certification Body or NCWM technical employee shall submit a completed
25 “VCAP Systems Audit Checklist for Private Label Certificate Holders” to NCWM.
26 Submitted documentation must contain a clear statement of compliance as a result of the
27 VCAP audit.

28 **ADM-21.3 Enhance VCAP Policy to Require 2nd Party Auditors to be Certified By NTEP**

29 **Source:**
30 NTEP Administrator

31 **Purpose:**
32 Add the requirement that individual auditors associated with a Certification Body, are required to have successfully
33 completed an NCWM, VCAP Auditor Certification Class before being qualified to perform VCAP audits on
34 manufacturers holding an NTEP Certificate of Conformance. The proposal also removes the accreditation requirement
35 based on Standard Industry Classification codes and updates the certification body auditors to require accreditation to
36 ISO 9001:2018 from the currently stated ISO 9001:2008.

37 **Item Under Consideration:**
38 Revise paragraph 21.1.3.3 Certification Body’s Responsibilities and NCWM Technical Employee Responsibilities
39 as follows:

- 40 **21.1.3.3 Certification Body’s Responsibilities and NCWM Technical Employee Responsibilities:**
- 41 21.1.3.3.1 The selected Certification Body is to be accredited by ANSI-ASQ National Accreditation
42 Board (ANAB) or by a Signatory of the International Laboratory Accreditation
43 Cooperation (ILAC) Mutual Recognition. The ANSI, ANAB and ILAC are accreditation
44 bodies for management systems. ANAB and ILAC accredit certification bodies (CBs)

1 for ISO 9001 quality management systems (QMS), ISO 17025 laboratory testing
2 facilities and ISO 14001 environmental management systems (EMS), as well as a
3 number of industry specific requirements.

4 ~~21.1.3.3.2 With accreditation to Standard Industry Classification (SIC) codes (3596/3821) or~~
5 ~~equivalent.~~

6 ~~Sequence Number 2007 NAICS, U.S. Code 2007 NAICS U.S. Title~~
7 ~~847 333997 Scale and Bench Manufacturing~~

8 **The auditor representing the Certification Body shall have successfully completed the**
9 **NCWM, Verified Conformity Assessment Program Training Class. (Effective**
10 **January 1, 20xx.)**

11
12 ~~21.1.3.3.3-21.1.3.3.2.~~

13 ~~21.1.3.3.4-21.1.3.3.3.~~

14 ~~21.1.3.3.5-21.1.3.3.4.~~

15 This adoption of this item will increase the consistence and quality of a VCAP audit. Qualified auditors are well
16 trained for auditing procedures, but often do not understand the technical requirements the VCAP Policy places on
17 the sample testing to influence factors. This change to the policy would require audits to receive training which
18 would be focused on the technical requirements.

19 **ADM-21.4 Update reference to auditors accreditation to ISO 9001:2018**

20 **Source:**

21 NTEP Administrator

22 **Purpose:**

23 Updates the certification body auditors for private label audits to require accreditation to ISO 9001:2018 from the
24 currently stated ISO 9001:2008.

25 **Item Under Consideration:**

26 Revise paragraph 21.1.3.8.1. as shown below:

27 21.1.3.8.1 The selected Certification Body (auditor) shall be accredited to the ISO 9001:2008 **2018** standard
28 for providing audits and certifications of management systems.

29 **ADM-21.5 Expand VCAP to Include Devices That do not Require Influence Factor Testing**
30 **during the NTEP Certification Evaluation**

31 **Source:**

32 NTEP Administrator

33 **Purpose:**

34 Modify VCAP Policy to included NTEP certified devices which do not undergo influence testing during the evaluation
35 process.

36 **Item Under Consideration:**

37 Amend the current VCAP Policy as shown below.

38 3. NTEP Verified Conformity Assessment Program Procedures

39 **Manufacturers of Many** NTEP certified devices must **ensure that ongoing production of these NTEP certified**
40 **devices must continue to** meet *NIST Handbook 44* requirements for ~~influence factors~~ **the device type**. It is not
41 **always** possible to verify **compliance to** these requirements during the Initial Verification in the field. Therefore,
42 manufacturers of **NTEP certified** metrological devices (instruments) and/or components (modules) ~~which are~~

1 ~~subject to influence factors, as defined in NIST Handbook 44,~~ must have a Verified Conformity Assessment
 2 Program (VCAP) in place to ensure that these metrological devices and/or components are produced to perform at
 3 a level consistent with that of the device and/or component previously certified. The Verified Conformity
 4 Assessment Program audit will be at one or more sites as required to verify compliance.

5 For weighing devices that are subject to influence factors, NTEP will require an ~~initial~~ on-site audit of the
 6 manufacturer’s quality system and on-site random testing and/or review of a production device(s) (instrument(s))
 7 by the Registrar to verify that all items listed below are currently implemented and functioning to verify compliance
 8 to the appropriate sections of *NIST Handbook 44*. **For all other devices, NTEP will require an on-site audit of**
 9 **the manufacturer’s quality system.**

10 It is important for NTEP to know the types of devices included in the VCAP audit and it is for this reason that the
 11 certificate holder shall prepare a controlled quality management system (QMS) document listing the range of
 12 parameters that cover the devices included in the audit. The certificate holder shall include in this document all
 13 certificates and device parameters (For example, **but not limited to:** different models, capacities, **flow rates,** e-
 14 min, n-max, ~~sizes~~-etc.) for the applicable device category. ~~For example, in a load cell audit, a range of capacities~~
 15 ~~of the load cells included in the audit shall be listed in the report.~~ This document shall be available for the VCAP
 16 auditor and NTEP upon request and may be included as an annex to the audit report if desired

17 **3.1. Requirements by Device Type**

18 3.1.1. **Weighing** devices that must meet **influence factor testing** ~~this requirement~~ are limited to the list
 19 below:

- 20 • Load Cell (T.N.8.)
- 21 • Indicating Elements (T.N.8.)
- 22 • Weighing/Load Receiving Elements 2000 lb capacity and less with non-NTEP Load Cells
 23 (T.N.8.)
- 24 • Complete Scales 2000 lb capacity and less (T.N.8.)
- 25 • Automatic Weighing Systems 2000 lb capacity and less (T.7.)
- 26 • Belt-Conveyor Scales (weigh-belt systems only) 2000 lb capacity and less (T.3)
- 27 • Automatic Bulk Weighing Systems 2000 lb capacity and less (T.7.)

28 **3.1.2. All other weighing and measuring devices must meet the quality control requirements of this**
 29 **policy**

30 **3.2. Requirements, The NTEP CC Holder’s Control Facility Responsibilities:**

31 3.2.1. A documented Quality Management System governing the design and manufacture of the device.

32 3.2.1.1 The NTEP CC holder shall prepare documentation of its various quality activities and
 33 practices required by this document and by NCWM’s Verified Conformity Assessment
 34 Program policy and procedures; and shall demonstrate the effective implementation of
 35 those activities and practices. This should include (and/or reference) the manufacturer’s
 36 quality manual, written procedures and work instructions, flowcharts, diagrams,
 37 drawings, etc., as appropriate.

38 **3.2.1.2. In addition to the requirements stated in 3.2.1.1., the following requirement apply**
 39 **to devices that requirement influence testing.**

40 *Renumber, as needed to next proposed change.*

41
 42 3.2.4.1. The NTEP CC holder, **for weighing devices subject to influence factor testing** shall
 43 establish a random sampling plan appropriate for the production quantity of the device
 44 that is traceable to a nationally recognized quality standard, i.e., Acceptable Quality Level
 45 AQL or equivalent, or meet the minimum requirements as defined in Section 21.1.3.5 of
 46 this document.

47 3.2.4.1.1. The NTEP CC holder shall maintain a controlled document listing all the
 48 devices, their estimated annual production quantity, the CC number of the

device and the date that the device was added to or removed from the sampling plan.

3.2.4.1.2. Devices shall be selected and tested in accordance to NCWM Publication 14 as designated by the established sampling plan.

3.2.4.1.3. Results of the testing, along with values of pertinent control parameters (e.g., time, temperature, humidity, etc.), shall be recorded and shall clearly identify whether the test passed or failed.

3.2.4.1.4. Records shall be made available to the VCAP auditor of test results since the last VCAP audit.

..... Renumber, as needed to next proposed change.

3.5. Sample Sizes:

3.5.1. **For devices subject to influence factor testing,** The following sample sizes are to be used based on annual production.

<u>Units per Year</u>	<u>Minimum Number (total of samples production) per Year</u>
2 – 50	2
51 – 500	3
501 – 35,000	5
35,001+	8

NTEP Verified Conformity Assessment Program Procedures for Private Label Certificate Holders

Manufacturers of Many NTEP certified devices must ensure that ongoing production of these NTEP certified devices must continue to meet *NIST Handbook 44, Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices*, requirements for ~~influence factors~~ **the device type**. It is not **always** possible to verify **compliance to** these requirements during the Initial Verification in the field. Therefore, manufacturers of **NTEP certified** metrological devices (instruments) and/or components (modules), ~~which are subject to influence factors, as defined in NIST Handbook 44,~~ must have a Verified Conformity Assessment Program (VCAP) in place to ensure that these metrological devices and/or components are produced to perform at a level consistent with that of the device and/or component previously certified.

~~For weighing devices that are subject to influence factors,~~ **for NTEP certified devices** traceable to a private label NTEP Certificate of Conformance, NTEP will require **an on-site audit of** the private label certificate holder **quality system** to verify that the parent certificate holder has complied with VCAP requirements, has a current VCAP audit certificate, the VCAP certification is traceable back to the parent NTEP certificate, and the parent certificate is active.

It is important for NTEP to know the types of devices included in the VCAP audit and it is for this reason that the certificate holder shall prepare a controlled quality management system (QMS) document listing the range of parameters that cover the devices included in the audit. The certificate holder shall include in this document all certificates and device parameters (For example: **but not limited to,** different models, capacities, e-min, n-max, sizes etc.) for the applicable device category. ~~For example, in a load cell audit, a range of capacities of the load cells included in the audit shall be listed in the report.~~ This document shall be available for the VCAP auditor and NTEP upon request and may be included as an annex to the audit report if desired.

~~3.1. Devices that Must Meet this Requirement are Limited to the List Below:~~

~~Load Cell (T.N.8.)~~

~~Indicating Elements (T.N.8.)~~

- 1 ~~Weighing/Load Receiving Elements 2000 lb capacity and less with non NTEP Load Cells (T.N.8.)~~
- 2 ~~Complete Scales 2000 lb capacity and less (T.N.8.)~~
- 3 ~~Automatic Weighing Systems 2000 lb capacity and less (T.7.)~~
- 4 ~~Belt Conveyor Scales (weigh belt systems only) 2000 lb capacity and less (T.3)~~
- 5 ~~Automatic Bulk Weighing Systems 2000 lb capacity and less (T.7.)~~

6 ~~3.2.~~ **3.1. Requirements: The Private Label NTEP CC Holder’s Responsibilities:**

7 Renumber, as needed to the end of the section.

8 **OTH – OTHER ITEMS**

9 **OTH-1 Electronic Vehicle Fueling Systems (EVFS)**

10 The California Division of Measurement Standards and NTEP Measuring Laboratories are working with U.S. National
11 Work Group Representatives and other experts to develop an NTEP checklist for electronic vehicle supply equipment
12 (EVSE).

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

17 The NTEP Measuring Labs discussed the item during their meeting on September 20, 2016. The consensus of the
18 laboratories was that the examination procedure outline developed by the State of California was not in a proper
19 *NCWM Publication 14* checklist format. Another prime issue that is still being developed is the test equipment
20 necessary to test these devices. NTEP cannot evaluate without standards for test equipment. Will NIST traceability
21 be required? The Measuring Laboratories concluded that the present *NCWM Publication 14* checklist for RMFDs
22 would be a good starting point to use in drafting a *NCWM Publication 14* checklist for EVSE. The NTEP
23 Administrator and NTEP Measuring Laboratories recommend the NCWM Board of Directors / NTEP Committee
24 consider establishing an NTEP Work Group or Task Force to address the EVSE issues.

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

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

37 The next schedule conference call for the EVSE Work Group is scheduled for Tuesday, January 7, 2020.

38 The CA Lab has purchased EVSE test standards for both laboratory and field testing. The test standards are out for
39 certification. NTEP expects to perform the initial evaluation of an EVSE device in early 2020.

40 For questions on the status of the work group please contact NTEP Administrator Darrell Flocken at
41 darrell.flocken@ncwm.com.

NTEP 2021 Interim Meeting Agenda

- 1 During the 2020 Interim Meeting no comments were heard on this item.
- 2 The EVSE Work Group completed the 2nd draft of the NTEP Evaluation Checklist in early November. The checklist
- 3 is undergoing formatting work. In December 2020, a small group began the final comparison review of the checklist
- 4 contents to the tentative EVSE Code in Handbook 44. Once completed, the checklist will be compared to the CA
- 5 evaluation checklist currently in use to include any additions or corrections learned from their evaluation experience.

-
- 6 Mr. Craig VanBuren, Michigan | Committee Chair
 - 7 Mr. Hal Prince, Florida | NCWM Chairman
 - 8 Mr. Mahesh Albuquerque, Colorado | Member
 - 9 Mr. Jack Walsh, Town of Wellesley, Massachusetts | Member
 - 10 Mr. Ivan Hankins, Iowa | Member
 - 11 Mr. Darrell Flocken, NCWM | NTEP Administrator
 - 12 **National Type Evaluation Program Committee**

Appendix A

NTEP Statistics Report

(As of September 30, 2020)

General NTEP Statistics	Last Year	This Year
	10/01/18 – 9/30/19	10/01/19 – 9/30/20
Total Applications Processed	(24) 350	(19) 298
Applications Completed	345	293
New Certificates Issued	316	270
Active NTEP Certificates		2244

() = Reactivations

Assignments to Labs per Year	10/1/18 – 9/30/19	10/01/19 – 9/30/20
California	29	(2) 30
Canada	2	1
FGIS-IL	0	0
FGIS-KC	12	9
Kansas	3	2
Maryland	7	6
New York	(2) 22	(1) 19
NIST Force Group	2	5
North Carolina	7	(1) 6
Ohio	62	(1) 62
Oregon	1	0
NTEP Staff	80	(4) (7) 158
Applications Not Yet Assigned to a Lab	0	1

() = Reassignments from another lab

Process Statistics	10/2008 - Present
Average Time to Assign an Evaluation	4.1 Days
Average Time to Complete an Evaluation	80.8 Days

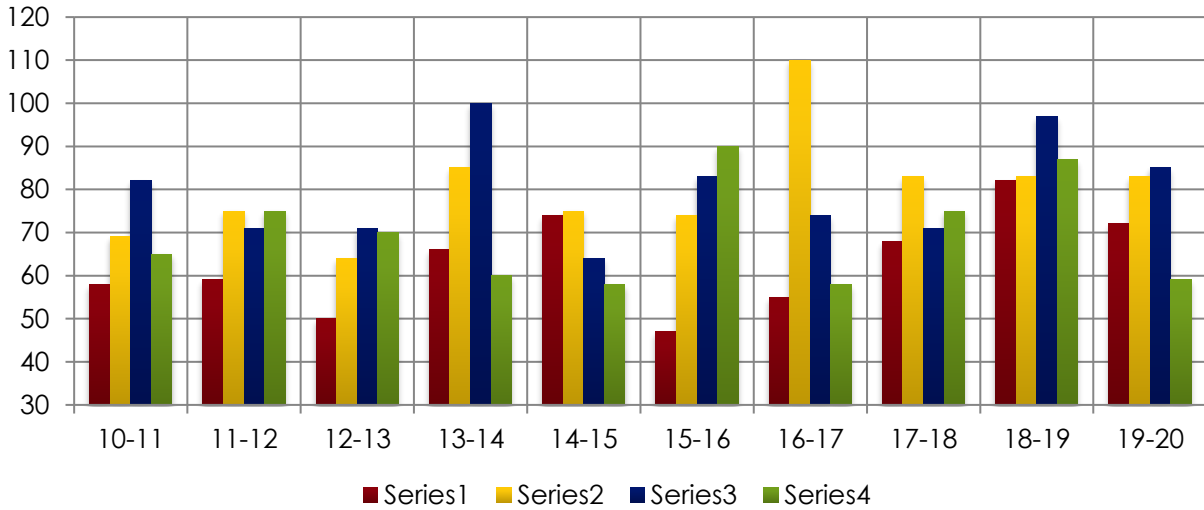
Report on Evaluations in Progress

Evaluations in Progress	0-3 Months	3-6 Months	6-9 Months	9-12 Months	Over 1 Year	Total
September 30, 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
December 31, 2018	42	17	18	11	8	96
March 15, 2019	36	16	11	13	15	91
June 30, 2019	55	16	6	5	16	98
September 30, 2019	40	23	11	4	11	89
December 31, 2019	35	23	17	6	10	91
February 29, 2020	43	19	16	8	11	97
June 30, 2020	61	28	14	7	11	121
September 30, 2020	36	28	18	8	18	109

In Progress by Lab	0-3 Months	3-6 Months	6-9 Months	9-12 Months	Over 1 Year	Total
California	6	7	4	1		18
Canada		1			2	3
FGIS-IL						0
FGIS-KC		9			2	11
Kansas		1				1
Maryland	2	1		1	5	9
New York	2	1	4		1	8
NIST Force Group				1	1	2
North Carolina	3					3
Ohio	5	6	3	5	3	22
Oregon						0
NTEP Staff	18	2	7		4	31
Unassigned	1					

Total Pending: 109

10-Year Report on Applications Received by Quarter



	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19
Oct – Dec	58	59	50	66	74	47	55	68	82	72
Jan – Mar	69	75	64	85	75	74	110	83	83	84
Apr – Jun	82	71	71	100	64	83	74	71	98	85
Jul – Sep	65	75	70	60	58	90	58	73	87	59
Total	274	280	255	311	271	294	297	295	350	300

Average Per Quarter: 10-YR: 73.2

Average Per Quarter This FY: 75.0

Average per Year: 10-YR: 292.7