

Report of the National Type Evaluation Program (NTEP) Committee

Randy Jennings, Chairman
Executive Assistant
Tennessee Department of Agriculture

Reference
Key Number

500 INTRODUCTION

The National Type Evaluation Program (NTEP) Committee (hereinafter referred to as “Committee”) submits its report for consideration by the 96th National Conference on Weights and Measures (NCWM). This consists of the Interim Report presented in NCWM Publication 16 as amended in the Addendum Sheets issued during the Annual Meeting that was held July 17 - 21, 2011, in Missoula, Montana. The Committee considered communications received prior to and during the 96th Annual Meeting that are noted in this report.

Table A identifies the agenda and appendix items. The agenda items are listed by Reference Key Number, Item Title, and Page Number. The item numbers are those assigned in the Committee’s Interim Meeting Agenda. A Voting item is indicated with a “**V**” after the item number or, if the item was part of the consent calendar, by the suffix “**VC**.” An item marked with an “**P**” after the reference key number is an Informational item. An item marked with a “**W**” was Withdrawn by the Committee and generally will be referred to the regional weights and measures associations because it either needs additional development, analysis, and input or does not have sufficient Committee support to bring it before the NCWM. Table B contains provides a glossary of acronyms used in this report, and Table C provides a summary of the results of the voting on the Committee’s items and the report in entirety.

This report contains many recommendations to revise or amend National Conference on Weights and Measures (NCWM) Publication 14, Administrative Procedures, Technical Policy, Checklists, and Test Procedures or other documents. Proposed revisions to the publication(s) 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 *italics*.

Note: The policy of the National Institute of Standards and Technology (NIST) is to use metric units of measurement in all of its publications; however, recommendations received by the NCWM technical committees have been printed in this publication as they were submitted and may, therefore, contain references to inch-pound units.

**Table A
Index to Reference Key Items**

Reference Key Number	Title of Item	Page
500	INTRODUCTION	NTEP - 1
500-1	I Mutual Recognition Arrangement (MRA)	NTEP - 3
500-2	I Mutual Acceptance Arrangement (MAA)	NTEP - 4
500-3	I NTEP Participating Laboratories and Evaluations Reports	NTEP - 6
500-4	I National Type Evaluation Technical Committee (NTETC) Sector Reports	NTEP - 10
500-5	I Conformity Assessment Program	NTEP - 11
500-6	I NTEP Contingency	NTEP - 15
500-7	I Publication 14 – NTEP Administrative Policy	NTEP - 16

Appendices

Appendix A. NTETC Grain Analyzer SectorNTEP - A1
 Appendix B. NTETC Measuring SectorNTEP - B1
 Appendix C. NTETC Weighing Sector Meeting SummaryNTEP - C1
 Appendix D. NTETC Software Sector Meeting SummaryNTEP - D1
 Appendix E. NTETC Belt-Conveyor Scale Sector Meeting SummaryNTEP - E1
 Appendix F. Mutual Recognition AgreementNTEP - F1

Table B
Glossary of Acronyms*

BIML	Bureau of International Legal Metrology	IR	International Recommendation
CD	Committee Draft ¹	MAA	Mutual Acceptance Arrangement
CIML	International Committee of Legal Metrology	OIML	International Organization of Legal Metrology
CPR	Committee on Participation Review	MC	Measurement Canada
DD	Draft Document ²	R	Recommendation
DR	Draft Recommendation ²	SC	Subcommittee
DV	Draft Vocabulary ²	TC	Technical Committee
DoMC	Declarations of Mutual Confidence	UT	Utilizing Participant
IP	Issuing Participant	WD	Working Document ³

¹ CD: a draft at the stage of development within a technical committee or subcommittee; in this document, successive drafts are numbered 1 CD, 2 CD, etc.

² DD, DR, DV: draft documents approved at the level of the technical committee or subcommittee concerned and sent to BIML for approval by CIML.

³ WD: precedes the development of a CD; in this document, successive drafts are number 1 WD, 2 WD, etc.

* Explanation of acronyms provided by OIML.

Table C
Voting Results

<i>Reference Key Number</i>	<i>House of State Representatives</i>		<i>House of Delegates</i>		<i>Results</i>
	<i>Yeas</i>	<i>Nays</i>	<i>Yeas</i>	<i>Nays</i>	
500 (In its entirety) voice vote					Passed

Details of All Items
(In Order by Reference Key Number)

500-1 I Mutual Recognition Arrangement (MRA)

Background/Discussion: The MRA between Measurement Canada (MC) and the National Type Evaluation Program (NTEP) labs originated April 1, 1994. Since that time, the original MRA has expanded, and a second MRA covering measuring devices has been developed. The MRA pursuant to weighing devices will expire in January 2011, and the MRA for measuring devices will expire in July 2011. The NTEP Committee and members of the Board of Directors have been actively engaged with MC over the past two years to develop a new agreement that will continue our relationship with MC by formalizing an updated MRA that meets the needs of both the NCWM and MC, and includes both weighing and measuring devices in one document.

The scope of the current MRA's 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).

As part of this evaluation process, the NTEP Committee was asked to consider expanding the MRA to higher capacity scales. The NTEP weighing labs agreed that expanding the MRA should be considered and MC expressed willingness to consider a proposal from the NCWM. The NTEP Administrator opened communication with MC with a recommendation to expand the MRA to include electronic platform scales up to 14 000 kg (30 000 lb). The current limit is 1000 kg. If the limit was expanded to just platform scales (i.e., not including hoppers, OBWS, IIL), it appeared the only addition to what is required during an evaluation would be the field permanence test criteria (Pub 14, DES Sections 62.22., 63.7., 64.3., and 64.4.). Upon discussion with MC type evaluation personnel, other issues surfaced: a) MC tests some weighing elements up to 10 000 kg in the lab, applying influence factor requirements (power, temperature, EMI, etc). There is a size limit of 1.6 m x 1.6 m. NTEP has a lab test limit of 1000 kg and some of the chambers will not accommodate the larger weighing elements; and MC does not apply the minimum 20 day use limit for field permanence tests to field performance tests for "cost factor" reasons (i.e., they want to avoid a second visit to the site). MC initially had a 20 day use requirement- But replaced it with a 300 weighments test at half capacity and acquired equipment to have the permanence test conducted in their laboratory. Based upon this information, taking the current workload of the weighing labs and current economic conditions into consideration, NTEP does not plan to move forward with the expansion of the MRA to include larger capacity weighing devices at this time. Additionally, U.S. manufacturers requested that the Committee consider expanding the MRA to include Automatic Weighing Systems (AWS) and Multiple Dimension Measuring Devices (MDMD). The requests were discussed by the MC and the NCWM Board members. Expansion to include AWS was deemed inappropriate at this time because of significant differences in requirements. The inclusion of MDMD is under consideration. NTEP is working to identify differences between the United States and Canada technical requirements and test procedures.

At the NCWM Annual meeting in July 2010, the NCWM Chairman and Chair-elect as well as the NTEP Chair and Administrator met with Measurement Canada (MC) President and Vice-President and it was agreed to consider possible expansion of the MRA for multiple-dimension measuring devices (MDMD). It was also agreed that further information was needed before a decision could be made on such an expansion.

The NTEP Committee was asked to identify the differences between Canadian and United States requirements, procedures, and practices regarding the type approval evaluation of MDMDs. The NTEP MDMD Work Group began this task at the December 2010 meeting.

NTEP also requested that tests conducted at manufacturers' premises under the supervision of an NTEP evaluator be included in the scope of the MRA. MC expressed the desire to keep these evaluations outside the scope of the MRA for scales, load receiving elements, and electronic weight indicating elements.

In order to allow MC and the NCWM to review the NTEP MDMD work group analysis, MC President, Mr. Alan Johnston, and NCWM Chairman, Mr. Tim Tyson, signed a six-month extension agreement to the MRA for weighing devices at the Interim Meeting in January 2011.

The NTEP Committee continued working with MC to develop a new "combined" agreement and to explore the possibility of expanding the scope to include Multiple Dimension Measuring Devices (MDMD) and higher capacity scales. Technical obstacles have taken both MDMD and higher capacity scales off the table for now, but NTEP and MC remain committed to continue to discuss expansion.

NTEP also requested that tests conducted at manufacturers' premises under the supervision of an NTEP evaluator be included in the scope of the MRA. MC expressed the desire to keep these evaluations outside the scope of the MRA for scales, load receiving elements, and electronic weight indicating elements.

MC, NTEP, and all of our mutual stakeholders agree that the MRA is a benefit for the North American weights and measures industry. Therefore, the NTEP Committee was proud to see the signing of a new MRA on Tuesday, July 19th, by NCWM Chairman, Mr. Tyson, and Measurement Canada President, Mr. Johnston, that combines the weighing and measuring devices into one document and provides for continued cooperation between the two organizations and continuation of the beneficial partnership. The new MRA will be effective for five years. A copy of the signed MRA is included with this report, see Appendix F.

500-2 I Mutual Acceptance Arrangement (MAA)

Background/Discussion: Information regarding the International Organization of Legal Metrology (OIML) Mutual Acceptance Agreement (MAA) can be found at www.oiml.org/maa. The NCWM has signed the OIML MAA DoMC for R 60 Load Cells as a utilizing participant. A Utilizing Participant is a participant which does not issue any OIML Certificates of Conformity (CC) nor OIML Test Reports and/or Test Reports under a DoMC but which utilizes the reports issued by Issuing Participants.

The OIML Technical Subcommittee for TC 3/SC 5 "Conformity assessment" is revising the following OIML B documents that are classified as Basic Publications:

- OIML B 3, "OIML Certificate System for Measuring Instruments;" and
- A combined revision of OIML B 10-1, "Framework for a Mutual Acceptance Arrangement on OIML Type Evaluations," and OIML B 10-2, "Checklists for Issuing Authorities and Testing Laboratories carrying out OIML Type Evaluations."

A 2 CD of B 3 and a 1 CD of the combined B 10 revision were distributed to TC 3/SC 5 "Conformity assessment" in December 2009. Comments were requested by April 30, 2010, in advance of a TC 3/SC 5 meeting planned for October 2010.

Plans to revise the OIML B 3 and B 10 documents are proceeding (the present revision will not incorporate the inclusion of test data from MTLs into B 10, but will keep it in B 3). It has recently been clarified by a TC 3/SC 5 member who wants to include test data from Manufacturers Testing Laboratories (MTLs) into B 10 that the data is not obtained under "unsupervised" conditions, but rather under conditions of "controlled supervision," meaning that, at a minimum, 1) a thorough review of the manufacturer's quality system has been performed; 2) the manufacturer has an independent testing laboratory that reports to the highest management level of the organization; 3) the Issuing Authority must be notified before any type approval tests are begun; 4) the Issuing Authority must be allowed to observe any and all testing on a short-notice basis; 5) the Issuing Authority is entitled to repeat any tests that it deems necessary, either at the manufacturing facility or at its own laboratory, at the manufacturer's expense; plus 6) possibly other requirements. In addition, the Issuing Authority (Issuing Participant) would take all responsibility for any test data it obtained from the manufacturer. It would not be required, however, that the Issuing Authority be

present at the MTL for all of the testing. The NCWM has already determined that NTEP will not accept test data from manufacturers unless there was an Issuing Authority representative on-site at the manufacturer's site to supervise 100 % of the testing.

Dr. Charles Ehrlich attended the TC 3/SC 5 meeting held October 2010 in France. The meeting had two intended objectives: 1) to further the process of incorporating necessary revisions to the two main documents pertaining to the OIML Certificate System for Type Evaluation (OIML B 3 on the OIML Basic Certificate System, and OIML B 10 on the OIML MAA; and 2) to further the possibility of permitting under the MAA the use of test data that is obtained directly from instrument manufacturers.

The revisions of B 3 and B 10 are necessary in order to update these documents to incorporate lessons learned over the last several years during the startup phase of the MAA. Revising the documents also permits their "harmonization," in the sense that the MAA is now seen as an extension of the Basic Certificate System, and so it is necessary to better clarify how the two systems work together, yet separately. The meeting focused on addressing some specific comments that had been submitted on draft revisions of B 3 and B 10 that had been circulated prior to the meeting. Topics discussed included legal obligations of authorities that issue OIML certificates, whether to combine all of the individual signed arrangements under the MAA into one master document, confidentiality of reports submitted to the Committees on Participation Review (CPRs) that decide which testing laboratories can participate in the MAA system, equity of the processes used for accreditation, or peer review of the testing laboratories, the number of participants required to begin an arrangement for a particular category of instrument, and several issues related to ownership of OIML Certificates (e.g., withdrawal and transfer of certificates). Revised drafts of the B 3 and B 10 documents were developed by the conclusion of the meeting, and will be circulated (along with responses to the comments) by the Secretariat to TC 3/SC 5 members for vote, with the objective of having final documents submitted to the International Committee on Legal Metrology (CIML) for their vote at the next CIML Meeting (October 2011).

The issue of whether to allow test data from manufacturers' test laboratories (MTLs) into the MAA has been contentious. The practice of utilizing test data from MTLs to issue national or regional type approval certificates has been used fairly successfully for many years in parts of Europe, but seems to be opposed in many other parts of the world, including by the NCWM. The NCWM continues to state its current position that NTEP will not accept test data from manufacturers unless there is an Issuing Authority representative on-site at the manufacturer's site to supervise 100 % of the testing.

At the January 2011 Interim Meeting, the NTEP Committee reviewed four items related to the revisions of B 3 and B 10: (1) housekeeping revisions to Document B 3; (2) housekeeping revisions to B 10; (3) revisions to B 10 that would incorporate provisions under which manufacturers' test data would be accepted under the MA, and (4) a resolution of compromise whereby countries may voluntarily accept manufacturers' test data. The NTEP Committee recommended that the Board of Directors authorize the U.S. Representative to vote YES on items (1) and (2), NO on item (3), and YES on item (4) with a qualifying statement that the United States would not accept any MAA certificates based on manufacturers' test data. The Board of Directors voted to support all of the recommendations from the NTEP Committee.

During the Annual Meeting, Dr. Chuck Ehrlich gave an update of current international activities. He reported that OIML held a two-day seminar in June 2011, in Utrecht, The Netherlands, to explore whether there is a role that OIML might play in an international conformity to type (CTT) program. The first day of the two-day seminar was devoted to formal presentations related to the topic. Presentations were provided by ISO and IEC on their conformity assessment programs, by United States (Mr. Don Onwiler), European, and Australian experts to discuss CTT programs in use in their countries/regions, by United States (Mr. Darrell Flocken) and European manufacturers to get their perspectives on the needs for, and likely success of, an OIML CTT program, and by a representative (from New Zealand) of the Asia Pacific Legal Metrology Program (APLMF) providing perspectives from that region. At the conclusion of the presentations, some participants indicated they had not realized how far the U.S. CTT program had come, and seemed glad to learn that it was operating and could possibly serve as a good model for others (while recognizing, of course, that NCWM/NIST documents/requirements, and not OIML Recommendations are used as the basis of the program).

The second day of the seminar was devoted to discussing issues raised during the first day, including "What is the problem needing to be solved by an OIML CTT program?", better clarification of concepts and terminology, and defining the scope of what an OIML CTT program might cover. The initial discussion focused on elaborating between the concepts of a complete CTT program that includes both initial verification and market surveillance, and what Mr. Onwiler characterized as a Performance to Type program (PTT) that looks only at compliance of production instruments that have not left the manufacturer's site. It was decided that any OIML program should be of the PTT rather than the CTT variety, since the latter is too broad in scope for OIML to handle, at least at the start. After additional discussion concerning what OIML might possibly be able to provide, it was decided that the best starting point for OIML would be the development of an OIML Document, similar to D 1 (Model Law on Metrology) that could serve as a best-practices document, which other countries/regions might try to emulate. The Document would describe the United States, European, Australian (for water meters) and possibly other systems. This will be discussed at a follow-up workshop being held in conjunction with the next meeting of the International Committee of Legal Metrology (CML) in Prague in October, 2011.

The NTEP Committee also heard concerns from U.S. manufacturers that some foreign labs authorized to conduct tests and issue MAA certificates, have stated they cannot test load cells to Handbook 44, Class IIIIL requirements. The Committee acknowledges there may be some confusion that needs to be addressed. The next OIML meeting of the Committee on Participation Review (CPR) addressing the maintenance and renewal of the R 60 DoMC is scheduled to be held September 21 - 23, 2011, in Germany. The NCWM Board of Directors has authorized the NTEP Administrator to attend the meeting and explore the issues.

500-3 I NTEP Participating Laboratories and Evaluations Reports

Background: During the 2010 Annual Meeting, Mr. Jim Truex, NTEP Administrator, updated the Committee on NTEP laboratory and administrative activities.

The NTEP weighing and measuring laboratories held a joint meeting March 22 - 26, 2010, in Sacramento, California. The NTEP weighing laboratories met again in August 2010, prior to the meeting of the Weighing Sector in Columbus, Ohio, and the NTEP measuring laboratories met once more in October 2010, prior to the Measuring Sector meeting in Columbia, South Carolina.

During the Interim Meeting, Mr. Truex reported to the Committee that incoming applications remain comparable to normal. He reported there is no backlog concern for measuring devices and the brick and mortar weighing labs at this time. Updated NTEP laboratory statistics will be provided to the membership at the NCWM Annual Meeting.

2011 NTEP Meetings:

- | | | |
|---------------------------------|-------------------------------|------------------------|
| • NTETC Belt-Conveyor Sector | February 23 - 24, 2011 | St. Louis, Missouri |
| • NTETC Software Sector Meeting | March 15 - 16, 2011 | Annapolis, Maryland |
| • NTEP Laboratory Meeting | March 28 - April 1, 2011 | Annapolis, Maryland |
| • NTETC Grain Analyzer Sector | August 24 - 25, 2011 | Kansas City, Missouri |
| • NTETC Weighing Sector | August 30 - September 1, 2011 | Sacramento, California |
| • NTETC Measuring Sector | October 21-22, 2011 | Norfolk, Virginia |

The Committee previously announced plans to conduct a survey of NTEP customers and NTEP laboratories regarding customer service. The Board plans to use the results of the survey to form a continuous improvement plan for NTEP. A small WG was formed to get the project rolling. The resulting draft was presented to the Board of Directors during the 2011 Annual Meeting in Montana. Like 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. The survey is expected to be ready for release to all active CC holders within the next six months.

The NTEP Committee reviewed the following NTEP statistics.

NTEP Statistics Report

General NTEP Statistics	2009 - 2010		2010 - 2011		*Grand Total	
	10/01/09 - 6/30/10		10/01/10 - 6/30/11		10/1/00 - 6/30/11	
Total Applications Processed	(6)	174	(41)	209	(188)	2850
Applications Completed		218		206		2567
New Certificates Issued		197		191		2297
Active NTEP Certificates on 6/30/2011						1797

() = Reactivations

Assignments to Labs per Year	10/1/09 - 9/30/10		10/1/10 - 6/30/11		10/1/00 - 6/30/11	
California	(1)	29	(1)	15	(15)	379
Canada		7		7	(4)	35
GIPSA-DC		1		0		15
GIPSA-KC		6		7		75
Kansas		13		7	(9)	65
Maryland	(4)	44	(6)	22	(19)	289
New York	(2)	8		1	(17)	161
NIST Force Group	(1)	14		8		82
North Carolina		13	(2)	14	(4)	94
Ohio		31		39	(15)	733
NTEP Staff		70	(1)	96	(9)	711
Applications Not Yet Assigned to a Lab						4

() = Reassignments from another lab

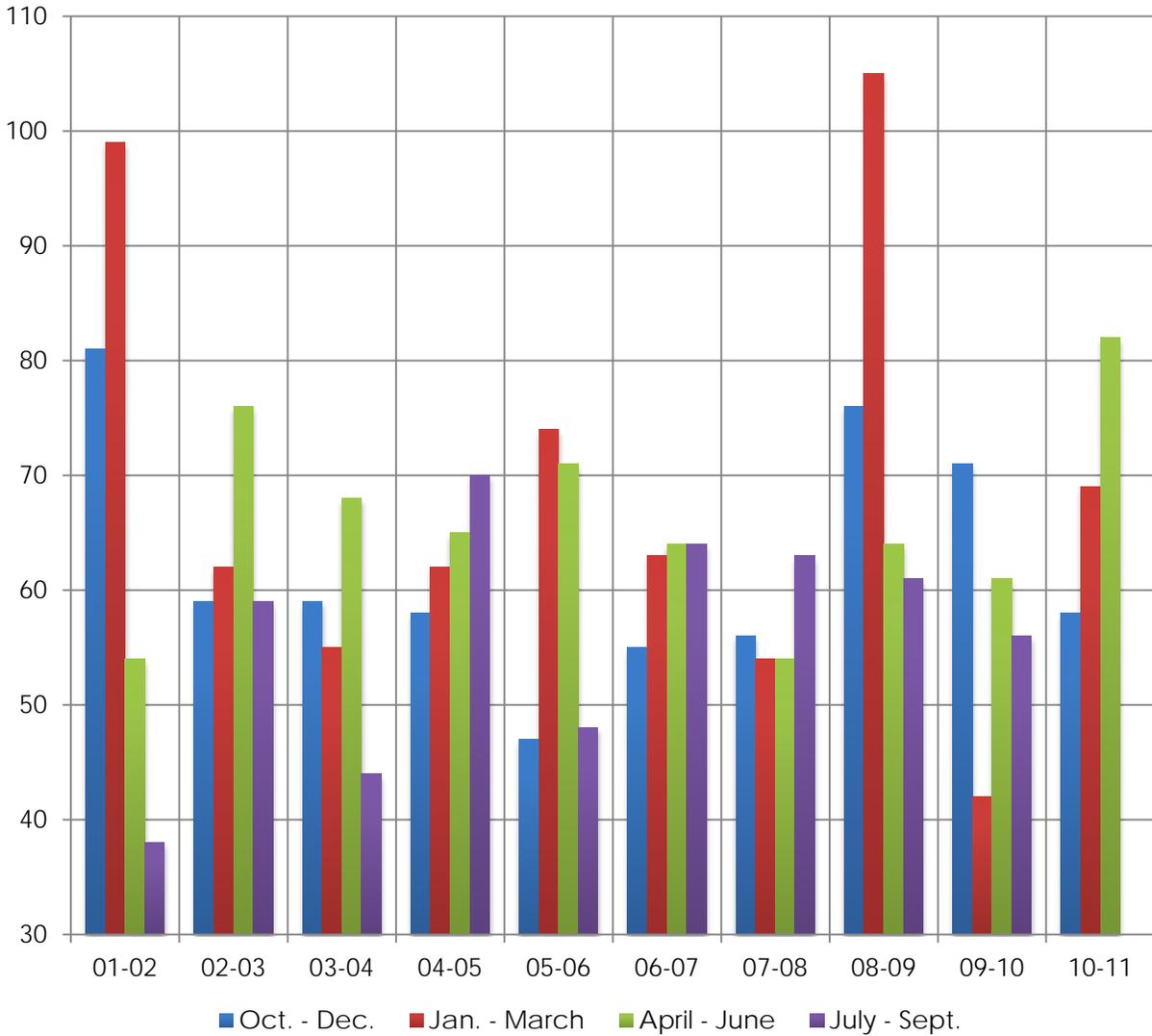
Process Statistics	2010 - 2011	2000 - 2011
Average Time to Assign an Evaluation	5 Days	10 Days
Average Time to Complete an Evaluation		144 Days

Report on NTEP Evaluations in Progress

Evaluations in Progress	0 - 3 Months	3 - 6 Months	6 - 9 Months	9 - 12 Months	Over 1 Year	Total
April 2009	58	29	27	17	36	167
June 2009	48	27	17	12	29	133
October 2009	41	33	18	12	33	137
December 2009	45	30	22	12	28	137
March 31, 2010	24	20	18	19	23	104
June 30, 2010	37	12	11	13	24	97
October 30, 2010	40	30	8	8	20	106
December 31, 2010	39	25	22	5	20	111
March 31, 2011	37	27	13	19	17	107
June 30, 2011	47	20	7	7	21	102

In Progress by Lab	0 - 3 Months	3 - 6 Months	6 - 9 Months	9 - 12 Months	Over 1 Year	Total
California	7	5	1	4	9	26
Canada	2	3	1	0	1	7
GIPSA-DC	0	0	0	0	0	0
GIPSA-KC	5	0	1	0	1	7
Kansas	5	1	0	0	3	9
Maryland	9	2	0	2	3	16
New York	0	0	0	0	0	0
NIST Force Group	2	4	1	1	2	10
North Carolina	2	1	1	0	0	4
Ohio	6	4	2	0	2	14
NTEP Staff	9	0	0	0	0	9
Total Pending:						102

Report on NTEP Applications Received by Quarter



Applications	01 - 02	02 - 03	03 - 04	04-05	05 - 06	06-07	07 - 08	08 - 09	09 - 10	10 - 11
Oct - Dec	81	59	59	58	47	55	56	76	71	58
Jan - Mar	99	62	55	62	74	63	54	105	42	69
Apr - Jun	54	76	68	65	71	64	54	64	61	82
Jul - Sep	38	59	44	70	48	64	63	61	56	
Total	272	256	226	255	240	246	227	306	230	209

Average Per Quarter Overall: 63.3

Average Per Quarter This FY: 69.7

500-4 I National Type Evaluation Technical Committee (NTETC) Sector Reports

Background/Discussion: The Committee is happy to report that all National Type Evaluation Technical Committee (NTETC) Sector reports were available to members at the time Pub 15 was published, and is committed to insuring that electronic versions of Sector reports are available with Pub 15 in the future. Please note that the Sector reports will only be available in the electronic version of Pub 15; it will not be available in the printed versions of Pub 15. (NIST/WMD – www.nist.gov/pml/wmd/index.cfm and NCWM – www.ncwm.net)

Grain Moisture Meter and NIR Protein Analyzer Sectors: The NTETC Grain Moisture Meter and NIR Protein Analyzer Sectors held a joint meeting in Kansas City, Missouri, August 25 - 26, 2010. A draft of the final summary was provided to the Committee, prior to the 2011 NCWM Interim Meeting for review and approval.

The next meeting of the Grain Moisture Meter and NIR Protein Analyzer Sectors is scheduled for August 24 - 25, 2011, in Kansas City, Missouri. For questions on the current status of Sector work, or to propose items for a future meeting, please contact the Sector Technical Advisors:

Ms. Diane Lee
NIST WMD
100 Bureau Drive, Stop 2600
Gaithersburg, MD 20899-2600
Phone: (301) 975-4405
Fax: (301) 975-8091
e-mail: diane.lee@nist.gov

Mr. Jack Barber
J.B. Associates
10349 Old Indian Trail
Glenarm, IL 62536
Phone: (217) 483-4232
e-mail: barber.jw@comcast.net

Measuring Sector: The NTETC Measuring Sector met October 1 - 2, 2010, in Charleston, South Carolina. A draft of the final summary was provided to the NTEP Committee prior to the 2011 NCWM Interim Meeting for review and approval.

The next meeting of the Measuring Sector is scheduled to be held in Norfolk, Virginia, October 21 - 22, 2011, in conjunction with the Southern Weights and Measures Association's 2011 Annual Meeting. Tina Butcher announced that the NIST WMD has assigned a new Sector Technical Advisor for 2011, Mr. Marc Buttler. For questions on the current status of Sector work, or to propose items for a future meeting, please contact the Sector Technical Advisor:

Ms. Tina Butcher
NIST WMD
100 Bureau Drive, Stop 2600
Gaithersburg, MD 20899-2600
Phone: (301) 975-2196
Fax: (301) 975-8091
e-mail: tbutcher@nist.gov

Mr. Marc Buttler
NIST WMD
100 Bureau Drive, Stop 2600
Gaithersburg, MD 20899-2600
Phone: (301) 975-4615
Fax: (301) 975-8091
e-mail: marc.buttler@nist.gov

Software Sector: The NTETC Software Sector met March 2 - 3, 2010, in Sacramento, California. A final draft of the meeting summary was provided to the Committee, prior to the 2011 NCWM Interim Meeting for review and approval.

The next meeting of the Software Sector is scheduled for March 15 - 16, 2011, in Annapolis, Maryland. For questions on the current status of Sector work or to propose items for a future meeting, please contact the Sector Chairs and NTEP Administrator:

Mr. Jim Pettinato
Sector Chair
FMC Technologies
1602 Wagner Avenue
Erie, PA 16510
Phone: (814) 898-5250
Fax: (814) 899-3414
e-mail: jim.pettinato@fmcti.com

Mr. Norm Ingram
Sector Chair
CA Div. of Measurement Standards
6790 Florin Perkins Road, Suite 100
Sacramento, CA 95828
Phone: (916) 229-3016
Fax: (916) 229-3026
e-mail: ningram@cdfa.ca.gov

Mr. Jim Truex
NTEP Administrator
NCWM
1135 M Street, Suite 110
Lincoln, NE 68508
Phone: (740) 919-4350
Fax: (740) 919-4348
e-mail: jim.truex@ncwm.net

Weighing Sector: The NTETC Weighing Sector met August 31 - September 2, 2010, in Columbus, Ohio. A final draft of the meeting summary was provided to the Committee, prior to the 2011 NCWM Interim Meeting for review and approval.

The next Weighing Sector meeting is scheduled for August 30 - September 1, 2011, in Sacramento, California. Tina Butcher announced that the NIST WMD has assigned a new Sector Technical Advisor for 2011, Mr. Richard Harshman. For questions on the current status of Sector work or to propose items for a future meeting, please contact the Sector Technical Advisor:

Mr. Rick Harshman
NIST WMD
100 Bureau Drive, Stop 2600
Gaithersburg, MD 20899-2600
Phone: (301) 975-8107
Fax: (301) 975-8091
e-mail: richard.harshman@nist.gov

Belt-Conveyor Scale Sector: The NTETC Belt-Conveyor Scale Sector met February 24 - 25, 2009, in St. Louis, Missouri. A final draft of the meeting summary was provided to the Committee, prior to the 2010 NCWM Interim Meeting for review and approval.

The next meeting of the Belt Conveyor Scale sector is scheduled for February 23 - 24, 2011, in St. Louis, Missouri. For questions on the current status of Sector work or to propose items for a future meeting, please contact the Sector Technical Advisor:

Mr. John Barton
NIST WMD
100 Bureau Drive, Stop 2600
Gaithersburg, MD 20899-2600
Phone: (301) 975-4002
Fax: (301) 975-8091
e-mail: john.barton@nist.gov

The NTEP Committee reviewed and approved all 2010 NTETC Sector reports during the Interim Meeting. The Committee also reviewed and approved a report of the Multiple Dimension Measuring Device Work Group from their meeting held December 7 - 8, 2010. The Northeast region was represented by Mr. Mark Coyne due to the absence of Mr. Sikula.

500-5 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, the 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 NTEP Committee offered, during the CC annual maintenance fee invoice period, an opportunity for active certificate holders to update contact information that is contained in the “Submitted By” on certificates during the payment period with the payment of their annual maintenance fee. Many CC holders have taken advantage of the opportunity.

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 has been developed. The Committee wanted to have a simple form, perhaps web based for use by the state and local regulators. The form has been 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 the NCWM online at www.ncwm.net/content/initial_verification_report.

Verified Conformity Assessment Program (VCAP): The NCWM and NTEP have been concerned about production meeting type, protecting the integrity of the NTEP CC since the inception of NTEP. Load cells traceable to NTEP certificates have been selected for the initial effort. All holders of NTEP CCs for load cells have been notified.

The NCWM Board of Directors reconfirmed its belief that conformity assessment is vital to NTEP’s continued success and will be implemented. VCAP Audit Reports for manufacturers with load cell certificates were due no later than June 30, 2010. VCAP Audit Reports for private label certificate holders were due no later than November 30, 2010. VCAP for load cells will occur according to the final timelines below.

NTEP VCAP Timeline – Load Cell Manufacturer Certificate Holders				
Jul 2008 – Ongoing	Jan 2009 – Jun 2010	Jan 2010 – Sep 2010	Jul 2010 – May 2011	May 2011
Refine VCAP procedures	LC Manufacturers to put VCAP QM system in place	NTEP to evaluate incoming Certification Body audit reports	NTEP to contact manufacturers not meeting VCAP and encourage compliance	CCs declared inactive if CC holder fails to meet VCAP
Answer incoming questions	Conduct audit by Certified Body		Continue to evaluate incoming audit reports	
Refine/develop appeals process	Submit audit report to NCWM/NTEP			
Notify all CC holders of updated plan, Q&A, etc.				

NTEP VCAP Timeline – Load Cell Private Label Certificate Holders				
Jul 2008 – ongoing	Jan 2009 – Nov 2010	Jun 2010 – Mar 2011	Dec 2010 – May 2011	Nov 2011
Refine VCAP procedures	CC holders to put VCAP QM system in place	NTEP to evaluate incoming Certification Body audit reports	NTEP to contact manufacturers not meeting VCAP and encourage compliance	CCs declared inactive if CC holder fails to meet VCAP
Answer incoming questions	Insure audit by Certified Body		Continue to evaluate incoming audit reports	
Refine/develop appeals process	Submit audit report to NCWM/NTEP			
Notify all CC holders of updated plan, Q&A, etc.				

The NCWM decided to require a systems audit checklist that is to be completed by an outside auditor, and submitted to the NCWM per Section 2.5 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 NCWM website at www.ncwm.net.

In 2010, the NCWM revised requirements for private label CC holder audits and auditors. A new checklist for private label certificate holders was developed and distributed. The requirements for the Certification Body and VCAP auditor were changed to require an “ISO auditor.” Clarification was requested to avoid confusion by private label auditors. The Committee added clarification language to the introduction section of the private label checklist.

Additionally, the Committee developed a new NCWM Publication 14 (Pub 14), Administrative Policy to distinguish between the requirements for parent NTEP certificate holders (S.1.c.) and private label certificate holders. The requirements in S.1.d. 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.

Proposed S.1.d. NTEP Verified Conformity Assessment Program (VCAP) Procedures for Private Label Certificate Holders

Introduction

Many NTEP Certified devices must meet NIST Handbook 44 (HB 44), *Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices*, requirements for influence factors. It is not possible to verify these requirements during the Initial Verification in the field. Therefore, manufacturers of metrological devices (instruments), and/or components (modules), which are subject to influence factors, as defined in HB 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, traceable to a private label NTEP Certificate of Conformance, NTEP will require the private label certificate holder 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.

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

- Load Cell (T.N.8.)
- Indicating Elements (T.N.8.)
- Weighing/Load Receiving Elements with non-NTEP Load Cells (T.N.8.)

- Complete Scales (T.N.8.)
- Automatic Weighing Systems (T.7.)
- Belt-Conveyor Scales (T.3)
- Automatic Bulk Weighing Systems (T.7.)

Requirements:

1. The Private label NTEP CC Holder's Responsibilities:

- 1.1 Documentation is available to show that all private label certificates are traceable back to a parent certificate holder(s).
- 1.2 All parent certificates are active.
- 1.3 Records are records available to show the private label certificate holder has confirmed that the supplier has a current VCAP audit meeting applicable requirements.
- 1.4 The private label certificate holder's purchase and sales records verify that no other supplier is providing the product listed on the NTEP certificate.
- 1.5 The supplier's sales records agree with the private label certificate holder's purchasing records.
- 1.6 The private label certificate holder has a plan in place to report non-conformance to the supplier.
- 1.7 The private label certificate holder has a plan in place to address non-conforming devices already sold or in stock.
- 1.8 The private label certificate holder has a plan in place to conduct internal audits to verify non-conformance action. Internal audits shall be conducted at established intervals, not to exceed one year.
- 1.9 Surveillance audits for VCAP conducted by an outside auditor representing a certification body must be completed. The surveillance audits will be conducted every three years until objective evidence is obtained to move to a maximum of every five years.
- 1.10 The NTEP private label CC holder shall take corrective action within 90 days of non-conformances sited by the auditor.
- 1.11 All records and plans shall be made available to the VCAP auditor.

2. Certification Body's Responsibilities:

- 2.1. The selected Certification Body (auditor) shall be accredited to the **ISO 9001:2008** standard for providing audits and certifications of management systems.
- 2.2. The Certification Body is required to notify NCWM when a major breakdown of the NTEP private label CC holder's VCAP program is found.
- 2.3. The Certification Body shall submit a completed "VCAP Systems Audit Checklist for Private Label Certificate Holders" to NCWM. Submitted documentation must contain a clear statement of compliance as a result of the VCAP audit.

3. NCWM Responsibilities:

- 3.1. For new certificate holders, ensure that VCAP certification has been completed within a one year cycle of the first maintenance fee, but not to exceed 18 months (example: if NTEP certified in July 2011. VCAP certification would be required by November 2012).
- 3.2. As part of annual maintenance, NCWM shall ensure that VCAP audit reports are on file, current, and that all non-conformances have been addressed.
- 3.3. Ensure that an appeals process is in place and made available to Certificate holders. [Note: The appeal and review process contained in section T. of this document shall be used.]

Current Comment: At the Interim Meeting, the Committee heard no opposition to the proposed S.1.d. section to NCWM Publication 14, Administrative Policy. It was recommended that the citation of the ISO 9001 standard be updated to reflect the updated 2008 standard, which has been changed in subsection 2.1. The NTEP Committee was again asked to announce which device(s) will be next after load cells. Comments from the membership also urged the NTEP Committee to look at what issues surfaced, based upon the load cell VCAP initiative, and how we can improve VCAP before moving on to the next phase.

During the Annual Meeting open hearing, the NTEP Committee announced that the next device category under consideration is weighing/load receiving elements, 2000 lb capacity and less using load cells that are not traceable to their own NTEP certificate. The NTEP Committee would like to receive comments from the membership so that the NTEP Committee can identify and understand any concerns before a final decision is made and timetable established.

The NTEP Committee heard comments from several manufacturers pertaining to VCAP and the next device category. The Committee expects there will be additional questions and is considering the need to form a VCAP committee to discuss the issues. However, the NTEP Committee would like to have a better understanding of the specific questions and concerns. Certificate holders and other interested parties are encouraged to submit written questions to the NTEP Committee so decisions can be made regarding the need for a VCAP Committee and, if needed, the make-up of the group.

500-6 I NTEP Contingency

Source: NTEP Committee

Purpose: NTEP Contingency, to keep NTEP operating and ensure NTEP services are available at an adequate level. The NTEP Committee wants to ensure there is an appropriate number of laboratories and personnel (evaluators) to maintain viable support for NTEP services, including MRAs, MAAs, and potentially to be an R 76 Issuing Participant.

Item Under Consideration: The NTEP Committee discussed contingency planning for continuity of NTEP operations. With the state of today's economy, what if NTEP lost a lab? How will NTEP maintain workflow? Are there additional states interested in applying to become an NTEP field lab or an NTEP brick-and-mortar lab? The NTEP Committee will continue to discuss these issues during a long-range planning session and welcomes comments from the membership.

Issues under consideration include should the NCWM:

1. Employ NTEP evaluators to conduct testing at manufacturer's facilities?
2. Have evaluators under contract to conduct testing at manufacturer's facilities?
3. Employ NTEP evaluators or have evaluators under contract to assist the state NTEP laboratories?
4. Have a brick and mortar NTEP laboratory and NTEP evaluators?

5. Use a private third party laboratory to conduct NTEP evaluations?

The Committee heard testimony expressing support and concerns pertaining to the options. Several stated that the Committee should consider adding OIML MAA participation as a Utilizing Participant to the list. Another urged the Committee to continue working on the idea of NCWM NTEP evaluators, an NCWM NTEP lab, and keeping all options open. One member asked the Committee to consider accepting manufacturer compliance data in lieu of hiring NTEP contractors. Another suggestion from the floor was to consider beefing up and utilizing “Initial Verification” as part of the NTEP process. A representative of a state brick and mortar NTEP laboratory asked the Committee to move cautiously forward and not destroy the state NTEP labs. He expressed concern that the establishment of an NCWM/NTEP brick and mortar lab could lead to significant legal complications for the states.

Current Comment: The NTEP Committee wants the membership to know that, at this time, the preferred course of action would be the evaluators under contract option. The Committee recognizes the commitment states with NTEP laboratories have made over the years, and would only resort to contingency measures in the event of a severe loss of state lab resources. Labs are handling current demand without a need for contingency measures. The Committee continues to keep NTEP contingency a top priority and watch over the status of the laboratories.

500-7 I Publication 14 – NTEP Administrative Policy

Source: NTEP Committee

Purpose: The NTEP Committee feels that it in the best interest of the program to amend the NTEP Administrative Policy to make it clear that the manufacturers/CC holders are obligated to meet current HB 44 requirements, regardless of when the devices covered by the NTEP certificate(s) were evaluated and the certificate was issued.

Item Under Consideration: Amend sections D.2., J.1.a, R. and S. as follows.

Amend Section D.2. to read:

D.2. Responsibility for Reporting Occurrence of Modification

When a manufacturer **or other certificate holder** makes changes to a certified type, evaluation of the modification may be necessary. **Manufacturers and other certificate holders are responsible for ensuring compliance of the production devices to NIST Handbook 44. When changes to NIST Handbook 44 are adopted by the NCWM that affect the device traceable to an NTEP certificate, devices produced after the effective date must meet the current applicable Handbook 44 requirements.** The manufacturer must report changes that might require the attention of NTEP. The decision to report changes is dictated by the metrological significance of the modification.

a. Notification of Change

The manufacturer **or other certificate holder** notifies NTEP that a change to a certified device has been made or is contemplated. The manufacturer may make judgments concerning the modifications and request issuance of an approval of a modification, by citing the existing Certificate of Conformance, detailing the changes, giving any data, analysis, and conclusions concerning the technical or metrological consequences of the changes.

b. NTEP Options

On the basis of the manufacturer's **or other certificate holder's** notification, NTEP will decide whether or not to require an evaluation for approving the modification or issuance of a new Certificate of Conformance. NTEP will inform the ~~manufacturer~~ **certificate holder** accordingly.

Amend Section J.1.a to read:**J.1. Re-evaluation to Verify Compliance**

NTEP may decide to re-evaluate a previously evaluated type, whether or not a Certificate of Conformance has been issued. Re-evaluation must be justified based on considerations such as the following:

- a. Manufacturers and other certificate holders are responsible for ensuring compliance of the production devices to NIST Handbook 44. When changes to NIST Handbook 44 are adopted by the NCWM that affect the device traceable to an NTEP certificate, devices produced after the effective date must meet the current applicable Handbook 44 requirements. That is, devices manufactured after the effective date of any new non-retroactive regulations must meet the new requirements; devices manufactured prior to the effective date of such regulations must meet retroactive requirements only.

Amend Section R to read:**R. Post Evaluation Responsibility of ~~Manufacturer~~ Certificate Holder**

As a result of requesting an evaluation and accepting an NTEP Certificate of Conformance, the manufacturer implicitly claims that all devices manufactured as the type referenced in the Certificate of Conformance are the same type. Manufacturers and other certificate holders are responsible for ensuring compliance of the production devices to NIST Handbook 44. When changes to NIST Handbook 44 are adopted by the NCWM that affect the device traceable to an NTEP certificate, devices produced after the effective date must meet the current applicable Handbook 44 requirements. The certificate holder may be responsible for reporting modifications to NTEP, per section D.2.a. NTEP does not normally require re-evaluation for technical requirement changes to NIST Handbook 44 per section J.1.a. as compliance can be determined through field enforcement. If a production device is found with a model number corresponding to that referenced in the Certificate of Conformance, but which does not conform to the type, the Certificate of Conformance may be withdrawn.

Amend Section S to read:**S. Conformity Assessment Process**

Type approval (certification) is one of the main elements in the metrological control system for weighing and measuring devices used in commercial measurements. The NTEP Certificate of Conformance, issued by NCWM, is a tool used by weights and measures officials in the inspection and approval of those devices. NTEP looks at one or more devices in a family, during the evaluation process. This typically occurs in the early stages of product development or production, yet it is expected that a commercial device will have a useful production life of several years. It is inevitable that changes will occur in production methods or components, that new features will be added to improve the product to respond to user needs and that the technical and performance standards will change as NIST Handbook 44 evolves in its annual cycle. Some of these changes will result in the ~~manufacturer-certificate holder~~ requesting a re-evaluation. The content and format of a Certificate of Conformance will also evolve over time.

Conformity Assessment is a responsibility of the certificate holder. It is vital that the Certificate of Conformance accurately reflects the device design and its features. It is also vital that the device be manufactured in conformance with the applicable requirements, while the Certificate of Conformance is in active status. In addition to the type evaluation, described in Section E through G of this document, the steps below outline the measures NTEP will use to keep the Certificate of Conformance accurate and to ensure conformance.

Current Comment: Based upon comments heard from the floor during the open hearings, the NTEP Committee carefully reviewed the proposed language and decided the use of "manufacturers and other certificate holder" terminology appropriately describes the intent of the policies.

The review did reveal a need to change the word "insuring", found in paragraphs D.2., J.1.a. and R. to "ensuring". Also, a change was made to the last sentence in D.2.b. to read, "NTEP will inform the ~~manufacturer~~ certificate holder accordingly." The changes will be incorporated into the 2012 version of NCWM Publication 14.

Mr. Randy Jennings, Tennessee, NTEP Committee Chair

Mr. Tim Tyson, Kansas, NCWM Chair

Mr. Mike Sikula, New York

Mr. Brett Saum, San Luis Obispo County, California

Mr. Kurt Floren, LA County, California

NTEP Technical Advisor: Mr. Jim Truex, NTEP Administrator

National Type Evaluation Program Committee