NCWM and Legal Metrology

Jerry Buendel
Chairman

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NCWM – Our Mission

• Advance a healthy business and consumer climate
• Develop, publish and implement uniform and equitable weights and measures standards
• Use a consensus based standards development process
NCWM - History

• 1905 – Meeting of state officials called by the National Bureau of Standards

• Officials noted a severe lack of uniform regulations and standards

• Meetings became an annual event

• 1958 – NCWM was restructured
NCWM - Today

- 1997 – NCWM became a non-profit corporation
- Governance – Board of Directors, membership approvals, by-laws and policies
- Board of Directors – elected to five year terms, represent regions and industry. NIST and Measurement Canada are ex-officio members
NCWM today:

- 2251 members – Government officials, device manufacturers, consumer products industries, petroleum industries, auto manufacturers, trade associations, consumers and more

- Funding - Membership dues, NTEP program, sales of handbooks

- Full time staff – Lincoln, Nebraska
Standards - NIST Handbooks

- Handbook 44 - Specifications, tolerances and technical requirements for weighing and measuring devices
  - Used as a field enforcement manual by inspectors
  - Used by NTEP for certification standards
- Handbook 130 – Uniform laws and regulations in the area of legal metrology and fuel quality
  - Used as regulations for method of sale, labeling, fuel quality and more
- Handbook 133 – Checking the net content of packaged goods
NIST Handbooks

- Developed by a legislative like process at NCWM
- Published annually by NIST – available on Internet
- Serve as model standards and laws
- Voluntary adoption by states – various editions and modifications of handbook provisions
NCWM Role in United States Legal Metrology

Proposals to Amend Standards

Central Weights & Measures Association

Northern Weights & Measures Association

Western Weights & Measures Association

Southern Weights & Measures Association
General Process – Proposals to Amend Standards

- Proposals submitted to regional organizations by regulators or industry members
- Emergency proposal provisions – direct to NCWM
- Regional organizations deliberate and make recommendations
- Proposals considered at NCWM Interim Meeting – January
- Proposals further deliberated at NCWM Annual meeting - July
- Failed proposals may be reconsidered next year
Committee Process – Proposals to Amend Standards

- Proposals to amend Handbooks assigned to standing committees
  - Specifications and Tolerance Committee – HB 44
  - Laws and Regulations Committee – HB 130 & HB 133
  - Committees voluntarily staffed by regulators and industry. Terms are limited and chairmanship rotated

- NCWM Interim Meeting - January
  - Committees conduct open hearings and work sessions to deliberate on new and carry-over items
  - Committees determine
    - Which items are ready for a vote of membership
    - Which items need additional development
    - Which items are withdrawn from consideration
NCWM Role in United States Legal Metrology

- NIST provides technical support to regional and NCWM standing committees
- NCWM or NIST workgroups, task groups and sub-committees appointed to study and make recommendations on special topics
- NCWM facilitates communications between jurisdictions and interest groups
- Board of Directors oversee processes
NCWM Voting Process – Proposals Become Standards

- NCWM Annual Meeting - July
  - Committees hear testimony during open hearings
  - Committees conduct work sessions to deliberate on proposals

- Voting Session
  - Regulatory officials vote on technical items
  - Passed proposals placed in Handbooks
  - Failed proposals returned to committees
Obtaining NIST Handbooks

- NCWM members receive complimentary copies on request
- Order form for additional copies available from NCWM website:
  - www.ncwm.net
- Download from NIST web site:
  - http://nist.gov/owm
National Type Evaluation Program (NTEP)

- **Purpose**
  - Assure buyers and sellers that devices are suitable for use in commercial transactions
  - Assure buyers and sellers of permanence and perform under influence factors

- **NTEP Certificate of Conformance** - Indicates that the device(s) described are capable of meeting NIST Handbook 44 requirements
Many jurisdictions and type evaluations used in the United States

1975 - National Bureau of Standards began issuing test reports, most states used reports for certificates

1984 - NCWM published Uniform National Type Evaluation Regulation

1984 to 1999 – NIST administered NTEP Program

2000 – NCWM assumed administration of NTEP
NCWM Role in United States Legal Metrology

NTEP - Today

**NCWM**
- Authorizes state and federal labs to evaluate instruments
- Issues the NTEP Certificates of Conformance
- Publishes administrative and technical policies, checklists, and test procedures in NCWM Publication 14
- Maintains a database of approved devices – available on NCWM website
- Conducts conformity assessment programs
- Board of Directors oversee policy and administration

**States**
- 48 require commercial devices have NTEP certification
NTEP – NCWM Publication 14

- Based on NIST Handbook 44 requirements and standards
- NCWM Publication 14 methods used to evaluate devices
- Handbook 44 and Publication 14 developed and adopted through NCWM
- NCWM Publication 14 is available for purchase on the NCWM website
Conformity Assessment Program

Initial Verification

Administrative Certificate Review

Verified Conformity Assessment Program (VCAP)

Conformity Assessment
Similar Methods and Mission

The International System

- Many Nations
- OIML
- Standards Development
- Type Evaluation

The United States System

- States and Territories
- NCWM
- Standards Development
- NTEP
Thank You!