



November 07, 2023

MEMORANDUM FOR: RMAP Participants and Laboratory Directors

From: Isabel Chavez Baucom,
Laboratory Metrology Program
Office of Weights and Measures

Subjects: 2024 Regional Measurement Assurance Programs (RMAP) Training

NIST Handbook 143, Table 2 notes that annual attendance at the RMAP training session is required for ongoing laboratory Recognition. Handbook 143, Program Handbook details the criteria used for OWM Laboratory Recognition. In addition, participation in ongoing RMAP proficiency tests (PTs) requires completion of training requirements to the designated level and attendance at the annual RMAP training sessions.

The 2024 Regional Measurement Assurance Program (RMAP) training events are scheduled in person as noted in the table below. Training topics are selected based on annual needs assessments; input is obtained during laboratory assessments, annual reviews of submitted data, laboratory requests, and input at prior regional training events.

NOTE: The in-person 2024 meeting is contingent on the status of the pandemic and we will do our best to provide adequate advance notice to the Regions about site changes.

Schedules:

The schedule, location, and contact host for each of the RMAP training are listed below. The agenda and detailed learning objectives are in the following sections. NIST will provide training content. Local hosts will provide details on the hotel and local registration logistics as each training event approaches.

Region	Dates	City, State <i>(City may change)</i>	Host Contact
SEMAP	March 19 to 21, 2024	Annapolis, MD	Tong Hsu Tong.Hsu@maryland.gov (410) 841-5790
WRAP	May 7 to 9, 2024	Honolulu, HI	Michael Tang Michael.Tang@Hawaii.gov (808) 832-0682
NEMAP	June 11 to 13, 2024	Augusta, ME	Brad Bachelder Bradford.Bachelder@maine.gov (207) 287-7587
SWAP	August 27 to 29, 2024	Broomfield, CO	Tiffany Brigner tiffany.brigner@state.co.us (303) 869-9230
MidMAP	September 24 to 26, 2024	Indianapolis, IN	William Geisler WGeisler@health.in.gov (317) 356-7078

Registration:

TWO registrations are required for each event (one with OWM and one with the HOST). The OWM Contact System generates attendee registration lists, name tags/tent cards, adequate training materials, and training certificates. The registration list is shared with the host. Registration fees for the RMAP training are determined by the local hosts. Every effort is made to keep registration fees to a minimum. Specific details about registration will be sent with information for each RMAP.

Agenda at a Glance:

Sessions will be held Tuesday through Thursday from 8:00 am to 5:30 pm each day. Successful completion requires full attendance and participation in group activities. If any participants leave early, attendance certificates will be adjusted accordingly and full attendance is required according to Handbook 143 by at least one staff member of the laboratory for full Recognition eligibility.

Monday	Tuesday	Wednesday	Thursday	Friday
	Laboratory Round Table (Lab Reports)	Volumetric Neck Scale Calibration -- Part 1	<ul style="list-style-type: none">Personnel (6.2)HB 143:2023 Updates	
	Lunch	Lunch	Lunch	
	<ul style="list-style-type: none">PT Plan & ReportsLab Visit	Volumetric Neck Scale Calibration -- Part 2	Project Management - Basics	

Abstracts and Learning Objectives:

TUESDAY--

Laboratory Round Table (Lab Reports) – Ongoing standard reporting of sections 6.2, 6.3, 6.4, 6.5, in the ISO/IEC 17025 standard plus reporting on accreditation, economics, and any measurement issues that come up.

Learning Objectives: After this session, participants will be able to:

- IDENTIFY general issues facing laboratories within their region;
- DESCRIBE action items they may want to take based on sharing and feedback during this session. OWM staff will facilitate this session; and
- IDENTIFY unique issues that may require national-level coordination or assistance.

RMAP PT Presentations, PT Reporting and Planning – This session will cover the annual reporting on PTs and planning for the next cycle. (OWM Objective: *Ensure compliance with the NIST Policy and Plan (NISTIR 7082 and HB 143)*) Each regional group is responsible for updating their 4-year PT plan with input from OWM. Regional participants will prepare draft reports and analyses prior to the training sessions. Final PT analyses and reports are prepared by OWM prior to the meeting. Each new coordinator is responsible for developing a PT Plan with inputs from participants and OWM to identify suitable objectives and appropriate standards to be circulated.

Learning Objectives: After this session, using the PT Plan, PT reports, and OWM PT Policy, participants will be able to

- IDENTIFY upcoming PTs for their laboratory and
- DESCRIBE action items they need to take to follow up on prior PT results. Session to be facilitated by OWM staff, regional PT coordinators, and PT coordinators.

Lab Visit and Assessment

Region	Lab Address
SEMAP	Maryland Department of Agriculture - Weights and Measures Calibration Laboratory 50 Harry S. Truman Parkway Annapolis, MD 21401-8960
WRAP	Hawaii Department of Agriculture Standards Laboratory Quality Assurance Division 1851 Auiki Street Honolulu, HI 96819-3100
NEMAP	Maine Metrology Laboratory 333 Cony Road Augusta, ME 04330
SWAP	Colorado Department of Agriculture 300 South Technology Court Broomfield, CO 80021
MidMAP	Eli Lily and Company 1402 South Dakota Street Indianapolis, IN 46225

WEDNESDAY--

Volumetric Neck Scale Calibration – Part I and Part II – This session will cover best practices and resources for performing neck scale plate checks for volumetric field standards according to SOP 31. It will review the guidance and importance of the process. In addition, best practices for adjusting neck scale plates when performing SOP 19 will be shared and reviewed. Participants will be able to share lessons learned and learn from each other experiences on checking and adjusting volumetric field standards neck scale plates.

Learning Objectives: After this session, participants will be able to:

- IDENTIFY common neck sizes and scale plate types used as volumetric field standards for legal metrology;
- DESCRIBE the requirements for scale plates on volumetric field standards;
- IDENTIFY determining factors on when a neck scale plate check or adjustment is needed;
- IDENTIFY best standards for checking neck scale for volumetric field standard;
- PERFORM a neck scale plate check and adjustment to a volumetric field standard; and
- APPLY lessons learned to improve calibration of volumetric field standards in volume laboratory.

THURSDAY--

HB 143:2023 Update – NIST OWM provides publications that are adopted as base regulation documents by state labs. NIST Publications are regularly reviewed by the OWM program with the assistance of technical experts. This update is 2023 and HB 143 was last updated in 2019. In this session, we will examine the updates to HB 143 and the implications for the core users.

The National Institute of Standards and Technology (NIST) Office of Weights and Measures (OWM) has developed performance standards and formalized procedures for the voluntary recognition of State legal metrology laboratories to encourage a high degree of technical and professional competence in calibration activities. It is the objective of NIST to encourage all State legal metrology laboratories to seek full recognition and formal accreditation. Technical assistance and consultation services are provided to State legal metrology laboratories to help achieve this goal (HB 143 Appendix A). Certificates of Metrological Traceability detail the recognized measurement scope that is issued upon evaluation of a laboratory's ability to reliably make metrologically traceable measurements related to legal metrology, principally the parameters of mass, volume, length, and temperature (HB 143 Appendix B).

Learning Objectives: After this session, participants will be able to:

- IDENTIFY the line item changes in the 2023 version compared to 2019 version;
- IDENTIFY key considerations of the updates to the state lab recognition process; and
- RECOGNIZE HB 143 appendix topics and where to find topic information.

Personnel - ISO/IEC 17025 section 6.2 – Labs have a responsibility to have the lab personnel act impartially, be competent, and work in accordance with the laboratory's management system per ISO/IEC 17025 section 6.2. This session will review the requirements of the standard, give labs an overview of compliance with the standard, and then an opportunity to workshop various means to achieve compliance using provided example material. Examples of actual documents will be showcased.

Learning Objectives: After this session, participants will be able to:

- IDENTIFY standard requirements, items that are required to be in the lab system to comply with the ISO/IEC 17025 standard;
- IDENTIFY key considerations when training, hiring, and monitoring laboratory personnel;
- DESCRIBE the process of keeping records, internal and external;
- APPLY a special technical assessment (STA) form on monitoring personnel competence (6.2.5 f) for the 2024 Annual Submission; and
- EXAMINE common concerns in the areas of succession planning, knowledge transfer, and accelerated training.

Project Management - Basics for U.S. State Weights and Measures Laboratories – This will provide State metrologists with the foundational concepts regarding project management. During this event, important practices and tools that will help you set up a successful project will be shared, including requirements defining, scheduling, and cost estimating. Project management basics also include developing and learning different Six Sigma Lean tools and techniques used in process improvement, as well as risk analysis, documentation, and project closure.

Learning Objectives: After this session, participants will be able to:

- IDENTIFY the process for defining and managing project requirements;
- RECOGNIZE the management activities involved in the scheduling process;
- IDENTIFY cost estimating approaches, techniques, and challenges; and
- IDENTIFY, DESCRIBE, and PRACTICE essential steps in scenarios.