




October 18, 2022

MEMORANDUM FOR: RMAP Participants and Laboratory Directors

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

Subjects: 2023 Regional Measurement Assurance Programs (RMAP) Training

NIST Handbook 143, Section 5.2, 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 2023 Regional Measurement Assurance Program (RMAP) training events are scheduled in person as noted in the table below after being delivered virtually in 2020 and 2021. 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 2023 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 is 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 27 to 30, 2023	Nashville, TN	Nicholas Andersen Nicholas.Andersen@tn.gov 615-253-4426
WRAP	May 15 to 18, 2023	Anchorage, AK	Garret L. Brown garret.brown@alaska.gov 907-365-1233
NEMAP	June 12 to 15, 2023	Albany, NY	Michael Lejeune Michael.lejeune@agriculture.ny.gov 518-457-3146
SWAP	August 28 to 31, 2023	Little Rock, AR	Jill Franke jill.franke@agriculture.arkansas.gov 501-219-6334
MidMAP	September 25 to 28, 2023	Chicago, IL	John Satterlee john.satterlee@illinois.gov 217-785-8480

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 from 8:00 am to 5:00 pm each day, except for Thursday. 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
Laboratory Round Table (Lab Reports) ---	Proficiency Testing Program for U.S. State Weights and Measures Laboratories--Part 1	Laboratory Design & Impact of Environment on Accurate Measurements--Part 1	<ul style="list-style-type: none"> • Customer Service & Workload Management • Conflict Resolution • Complaint (Inquiry) Handling (4.8);
Lunch	Lunch	Lunch	Region Meeting Ends at 12:30 p.m.
<ul style="list-style-type: none"> • Ergonomics and Laboratory Safety • Lab Visit and Assessment 	Proficiency Testing Program for U.S. State Weights and Measures Laboratories--Part 2	Laboratory Design & Impact of Environment on Accurate Measurements--Part 2	

Abstracts and Learning Objectives:

MONDAY--

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.

Cont. MONDAY--

Ergonomics and Laboratory Safety

Laboratory safety and ergonomics is central to the wellbeing of a metrologist. The session begins with an overview of common examples of laboratory safety, with ergonomics, as demonstrated by actual lab workplace set ups. Then the emphasis is on the process of recognizing safety hazards in the workspace and how to do so with skills and job-aid tools. To demonstrate this ‘safety awareness’ process, examples will be put forward of the safety considerations around emerging technology in the marketplace (such as Electrical Vehicle Charging Station test units) and job hazard analysis comparisons when choosing testing equipment (such as platform scale vs load cell equipment for testing of weight carts). Note: Lab Visit and Assessment will include a safety-oriented on-site practical exercise.

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

- IDENTIFY common areas in a metrology lab set up that have safety and ergonomics considerations for workers.
- IDENTIFY safety resources to use or reference in a job hazard analysis when presented with a new or reconfigured job task.
- ASSESS common workplace situations for possible safety hazards and level of risk associated with those hazards
- COMPARE two job tasks from a safety and ergonomic perspective using quality tool PMI checklist (Plus, Minus, Interesting).

Lab Visit and Assessment

Region	Lab Address
SEMAP	Tennessee Department of Agriculture Ellington Agriculture Center 5203 Marchant Drive Nashville, TN 37204
WRAP	Alaska Department of Transportation & Public Facilities 12050 Industry Way, Bldg "O" Suite 6 Anchorage, AK 99515-3593
NEMAP	New York Bureau of Weights and Measures 6 Harriman Campus Road Albany, NY 12206
SWAP	Arkansas Bureau of Standards 4608 W 61st Street Little Rock, AR 72209-2408
MidMAP	USDA/AMS/FGIS Master Scale Depot 5800 West 69th Street Chicago, IL 60638

TUESDAY—

Proficiency Testing Program for U.S. State Weights and Measures Laboratories: The purpose of this event is to provide participants in our U.S. Regional Measurement Assurance Program (RMAPs) with an overview of how proficiency testing programs are conducted and an explanation of how laboratory performance is evaluated. These presentations will cover the steps used in the updated version of NISTIR 7214—Office of Weights and Measures-Quality Manual for Proficiency Testing and Interlaboratory Comparisons. These steps also align with those covered in ISO/IEC 17043:2010. In addition, this session will cover the annual reporting on PTs and planning for the next cycle. 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 to identify appropriate standards to be circulated.

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

- IDENTIFY which criteria in ISO/IEC 17025 & HB143 address the requirements for proficiency testing in your lab
- Each region will PERFORM an update on its 4-year PT plan to ensure the calibration scope is covered within a four-year period
- Participants will also be able to IDENTIFY, DESCRIBE, and PRACTICE essential steps that are required when creating/developing a PT plan.
- 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.

WEDNESDAY

Laboratory design and impact on environmental conditions: This session will cover best practices and resources for designing and monitoring a laboratory. The facility requirements provided in ISO/IEC 17025 will be reviewed along with those of select calibration methods. Participants will be able to share lessons learned and learn from each other's experiences on how to maintain stable conditions.

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

- IDENTIFY key considerations when designing a new laboratory and lessons learned
- IDENTIFY environmental requirements for legal metrology laboratories
- DESCRIBE the process of performing a technical audit of laboratory environmental conditions
- APPLY the NIST OWM SOP 49 calibration process for environmental monitoring equipment
- EXAMINE common environmental monitoring equipment used in legal metrology laboratories

THURSDAY

Customer Service & Workload Management

This session is an overview of customer service. We begin with the definition of what a customer is and how various levels of 'customer' come into play in all business interactions where there is a service provided. Next we associate tips and tools to these service levels. Not overlooking how we serve ourselves in our workload management by prioritizing tasks more efficiently, improving the balance of work across your team, and creating more accurate project schedules. And finally we consider where to apply customer service for results and methods to capture those results (such as with surveys). In what areas would your lab like to see key results?

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

- DETERMINE who their customers are, by definition, type, and levels of interaction
- ACCESS some common customer service strategies and tools
- APPLY basic customer service tactics in their business communications for results

Conflict Resolution

Conflict resolution is the informal or formal process that two or more parties use to find a peaceful resolution to their dispute. The considerations built into conflict and resolution come to morality, politics and direct action. Morality is a set of rules used for resolving conflicts which society agrees with. Politics is the process of allying people. Direct action is the deeds. We often think that conflict in the workplace is either a slim possibility or an unavoidable occurrence. Neither is often the case. Each individual can learn the practical knowledge to recognize conflict and what resolution practices apply toward achieving a harmonious goal.

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

- IDENTIFY the different stages and the various levels of conflict by using provided job aid lists, charts and examples.
- RECOGNIZE pathways to resolution with CARE (Communicate, Actively Listen, Review Options and End with a Win-Win solution) the acronym for steps in the resolution process.
- ASSOCIATE your comfort level with each level of conflict and each stage of resolution within the controlled environment of a practical exercise

Complaint (Inquiry) Handling (4.8)

Labs have the responsibility to have a complaint handling process per ISO/IEC 17025 section 4.8. This training will review the requirements of the standard and then give labs an overview compliance to the standard. Module covers this compliance in complaint process from first contact to closure and how complaints relate to Corrective Action. With examples of SAP documents, forms and records.

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

- DEFINE a complaint and the earmarks of what makes a complaint
- IDENTIFY the items that are required to be in the lab system (quality management system and standard administrative program) to meet the ISO/IEC standard