UNITED STATES DEPARTMENT OF COMMERCE
National Institute of Standards and Technology
Gaithersburg, Maryland 20899

August 4, 2015 (*Amended to add CaMAP)*

MEMORANDUM FOR: RMAP Participants and Laboratory Directors

From: Georgia L. Harris, Laboratory Metrology Program
Office of Weights and Measures

Subjects: 2015 Regional Measurement Assurance Programs (RMAP) Training

2015 Regional Measurement Assurance Program (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 WMD 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 2015 Regional Measurement Assurance Program (RMAP) training events have been scheduled as noted in the table below. Training topics (see attached detailed agenda and abstracts) are selected based on annual needs assessments; input is obtained during laboratory assessments, annual reviews of submitted data, and laboratory requests.

Schedules and Locations:
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 hotel and local logistics as each training event approaches.

Region	**Dates**	**City, State** (*City may change based on local needs.)*	**Host Contact**
SEMAP	4/13/2015 to 4/16/2015	Tallahassee, FL	Amy Smith amy.smith@freshfromflorida.com (850) 921-1557
WRAP	5/4/2015 to 5/7/2015	Olympia, WA	Dan Wright DWright@agr.wa.gov (360) 753-5042
NEMAP	9/14/2015 to 9/17/2015	Needham, MA	Ray Costa Ray.Costa@Massmail.State.Ma.Us (781) 444-0219
SWAP	9/28/2015 to 10/1/2015	Jefferson City, MO	Kevin Hanson Kevin.Hanson@mda.mo.gov (573) 751-3440
MidMAP	10/5/2015 to 10/8/2015	Madison, WI	Rich McCann Richard.McCann@Wisconsin.gov (608) 224-4910
CaMAP	10/19/2015 to 10/22/2015 10/23: NCSLI Section Event	Bayamon, PR	Jose Torres (CaMAP) jatorres@nist.gov (787) 319-6174 Richard Santos (NCSLI Section) richard.adonies@gmail.com (787) 706-8855

Registration:

R*egistration fees* for the RMAP training will be determined by the local hosts in conjunction with NIST assistance. Every effort will be made to keep registration fees to a minimum. Specific details about registration will be sent with information for each RMAP. The OWM Contact System will be used to generate attendee registrations and lists and shared with each host (this will enable tracking, full contact lists, and preparation of attendees lists and training certificates.)

Detailed Training Agenda:

Sessions will be held from 8:00 am to 5:00 pm each day.

Monday (Harris)	**Tuesday** (Harris/Miller)	**Wednesday** (Harris)	**Thursday** (Harris)	**Friday**
Quality Tools and Processes Applied to Metrology	Laboratory Round Table and Identification of Regional Issues	Fundamentals of Metrology Topics Refresher Training – I	Fundamentals of Metrology Topics Refresher Training – III	Travel (CaMAP will have an NCSLI section training event on Friday.)
Lunch	Lunch	Lunch	Lunch	
Quality Tools and Processes Applied to Metrology (continued)	PT Reports and Planning PT Analysis Annual Submissions: Special Quality Management System Assessments and Special PT Analyses	Fundamentals of Metrology Topics Refresher Training – II	Fundamentals of Metrology Topics Refresher Training – IV	

Abstracts and Learning Objectives

Quality Tools and Processes. At the end of this session, participants will be able to: describe 7 quality tools and 5 processes and apply all tools and processes to at least one metrology example through hands-on case studies and activities conducted during the session. All examples can be taken back to the laboratory for immediate application and process improvement. Tools and processes include: Cause and Effect Diagram, Check/Data Sheet, Control Chart, Histogram, Pareto Chart, Scatter Diagram, Flow Chart, Plan-Do-Check-Act, Gantt Chart, SWOT Analysis, Brainstorming, and Five Whys.

Laboratory Round Table. Laboratory round table sessions help to identify major trends and changes among the laboratory community. Reports focus on changes and challenges related to facilities, equipment, standards, staffing, operations, and economic/workload issues. These items are covered in Handbook 143 and ISO/IEC 17025, Sections 5.2, 5.3, 5.4, 5.5, and 5.6. Specific follow up actions are identified.

PT Reviews and Planning. Proficiency testing results are presented and analyses and corrective actions are discussed. Planning is done to ensure that every laboratory has a PT available to cover every area of their scope at least once every four years. PT Plans must now be available for every laboratory and are a new Recognition and Accreditation Requirement (every recognized and/or accredited laboratory must have a PT Plan available for their Recognition and/or Accreditation Body). New software analysis and

applications will be presented and reviewed again to ensure effective application and review of proficiency testing reports.

Annual Submissions: Special Quality Management System Assessments and Special PT Analyses. At the end of this session, participants will be able to describe the special submission requirements State Laboratories for 2015. Special assessments will be conducted on the entire "laboratory quality management system, including laboratory master lists of documents" and on a multi-year assessment of laboratory participation and planning for proficiency tests.

Fundamentals of Metrology – Refresher. At the end of this session, you will be able to: identify and use reference materials to ensure quality, accurate, and traceable measurement results; explain highlights and key concepts of each topic (noted on the Table of Contents and the detailed learning objectives – see link here: http://www.nist.gov/pml/wmd/labmetrology/fundamental-metrology.cfm) to each other and to your managers and demonstrate how these topics fit in to a management system using ISO/IEC 17025 as the basis. This session will include an additional topic on Method Validation that is not covered in the regular Fundamentals of Metrology course. You will have and know how to use several simple tools, job aids, and references improve your laboratory operations. As this is a two-day course, it is not a substitute for successful completion of the 5-day Fundamentals of Metrology course at NIST, but is suitable as a refresher for all metrologists, including those who recently attended the courses and have not completed Fundamentals of Metrology, Laboratory Auditing Program, assigned problems. Activities and quizzes will be integrated into each module. Metrologists need to bring an example of a calibration report from their own laboratory or from a supplier to evaluate during several sessions.