

NEWMA Professional Development Committee (PDC) 2022 Annual Meeting Agenda

Mr. Ethan Bogren, Committee Chair
Westchester County, New York

INTRODUCTION

The PDC Committee (hereinafter referred to as the “Committee”) submits this Committee Interim Report for consideration by National Conference on Weights and Measures (NCWM). This report contains the items discussed and actions proposed by the Committee during the January Interim Meeting. The report will address the following items in Table A during the Annual Meeting. Table A identifies the agenda items by reference key, title of item, and page number and addresses the appendices by appendix designations and page number. The acronyms for organizations and technical terms used throughout the report are identified in Table B. The first three letters of an item’s reference key are assigned from the Subject Series List. The status of each item contained in the report is designated as one of the following status: **(D) Developing Item:** the Committee determined the item has merit; however, the item was returned to the submitter or other designated party for further development before any action can be taken at the national level; **(A) Assigned Item:** the committee has assigned development of the item to a recognized subcommittee or task group within NCWM. **(I) Informational Item:** the item is under consideration by the Committee but not proposed for Voting; **(V) Voting Item:** the Committee is making recommendations requiring a vote by the active members of NCWM; **(W) Withdrawn Item:** the item has been removed from consideration by the Committee.

Some Voting Items are considered individually; others may be grouped in a consent calendar. Consent calendar items are Voting Items that the Committee has assembled as a single Voting Item during their deliberation after the Open Hearings on the assumption that the items are without opposition and will not require discussion. The Voting Items that have been grouped into consent calendar items will be listed on the addendum sheets. Prior to adoption of the consent calendar, the Committee will entertain any requests from the floor to remove specific items from the consent calendar to be discussed and voted upon individually.

Committees may change the status designation of agenda items (Developing, Assigned, Informational, Voting and Withdrawn) up until the report is adopted, except that items which are marked Developing, Informational or Withdrawn cannot be changed to Voting Status. Any change from the Committee Interim Report (as contained in this publication) or from what appears on the addendum sheets will be explained to the attendees prior to a motion and will be acted upon by the active members of NCWM prior to calling for the vote.

An “Item Under Consideration” is a statement of proposal and not necessarily a recommendation of the Committee. Suggested revisions 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 *bold faced italics*. Additional letters, presentations and data may have been part of the Committee’s consideration. Please refer to <https://www.ncwm.net/meetings/annual/publication-16> to review these documents.

All sessions are open to registered attendees of the conference. If the Committee must discuss any issue that involves proprietary information or other confidential material; that portion of the session dealing with the special issue may be closed if (1) the Chairman or, in his absence, the Chairman-Elect approves; (2) the Executive Director is notified; and (3) an announcement of the closed meeting is posted on or near the door to the meeting session and at the registration desk. If possible, the posting will be done at least a day prior to the planned closed session.

Note: It is policy to use metric units of measurement in publications; however, recommendations received by NCWM technical committees and regional weights and measures associations have been printed in this publication as submitted. Therefore, the report may contain references to inch-pound units.

Subject Series List

Education	EDU Series
Program Management.....	PMT Series
Other Items.....	OTH Series

**Table A
Table of Contents**

Reference Key	Title of Item	PDC Page
EDU – EDUCATION.....		
2911		
EDU-1 I	Professional Certification Program	291
EDU-2 I	Training	297
EDU-3 I	Instructor Improvement.....	301
EDU-4 I	Recommended Topics for Conference Training	303
PMT – PROGRAM MANAGEMENT		305
PMT-1 I	Safety Awareness	305
PMT-2 I	Skimmer Education Task Group	307
Appendices		
A	EDU-2: Summary of NIST OWM Training Conducted in 2019	A312
B	EDU-2: NIST OWM Training - Future Plans	B314

**Table B
Glossary of Acronyms and Terms**

Acronym	Term	Acronym	Term
CWMA	Central Weights and Measures Association	OWM	Office of Weights and Measures
NCWM	National Conference on Weights and Measures	PDC	Professional Development Committee
NEWMA	Northeastern Weights and Measures Association	SWMA	Southern Weights and Measures Association
NIST	National Institute of Standards and Technology	WWMA	Western Weights and Measures Association
SETG	Skimmer Education Task Group		

Details of All Items
(In order by Reference Key)

1 **EDU – EDUCATION**

2 **EDU-1 I Professional Certification Program**

3 The NCWM offers nine professional certification exams and two basic competency exams. The certification exams
4 include Retail Motor Fuel Dispensers, Vehicle-Tank Meters, Small Capacity Scales, Medium Capacity Scales, Large
5 Capacity Scales, Precision Scales, LPG and Anhydrous Ammonia, Price Verification and Basic Package Checking.
6 Reporting on the Precision Scales exam begins this year. The competency exams include Basic Weighing Devices
7 and Basic Liquid-Measuring Devices. Professional certifications must be renewed every five years and NCWM
8 notifies candidates whose certificates have expired.

9 Proctoring was initiated as a first step towards accreditation of the certification program. Each organization is required
10 to register the proctors they intended to use. Proctor qualifications are different for basic competency exams and
11 professional certification exams so two lists of proctors are maintained. To eliminate conflicts of interest, proctors for
12 professional certification exams must not be immediate supervisors of the candidate. Virtual proctoring was initiated
13 in May 2021 and offered at no cost to members through the end of December 2021.

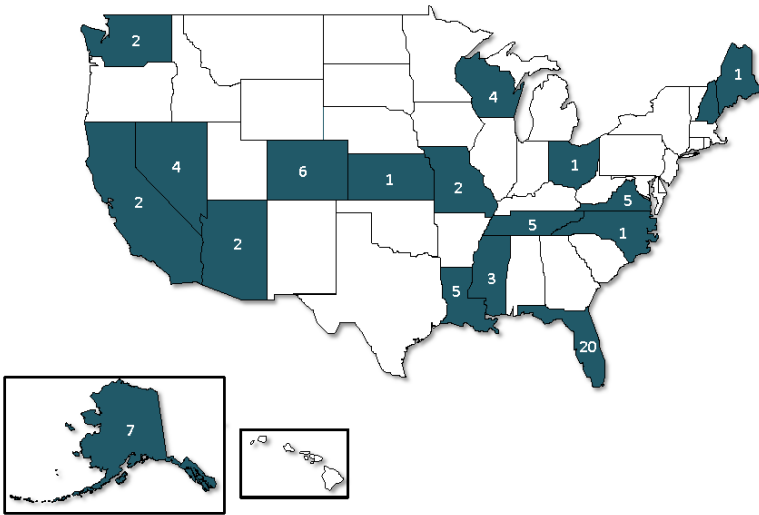
14 The requirements for proctors are posted on the NCWM website at <https://www.ncwm.com/proctoring>. Guidance for
15 virtual proctoring can be found on the same webpage and more detailed information, including a helpful YouTube
16 video on preparing for proctoring can be found on the ProctorU website at [https://support.proctoru.com/hc/en-
17 us/articles/360043565051-Exam-Day-What-to-Expect](https://support.proctoru.com/hc/en-us/articles/360043565051-Exam-Day-What-to-Expect).

18 **Number of States with Proctors and number of Proctors.** (As of November 2021)

	Professional Certification		Basic Certification	
	States	Proctors	States	Proctors
FY 17-18	7	17	10	39
FY 18-19	11	28	14	57
FY 19-20	16	37	18	70
FY 20-21	17	41	19	73

19 **Proctors per state – Basic Competency Exams:**

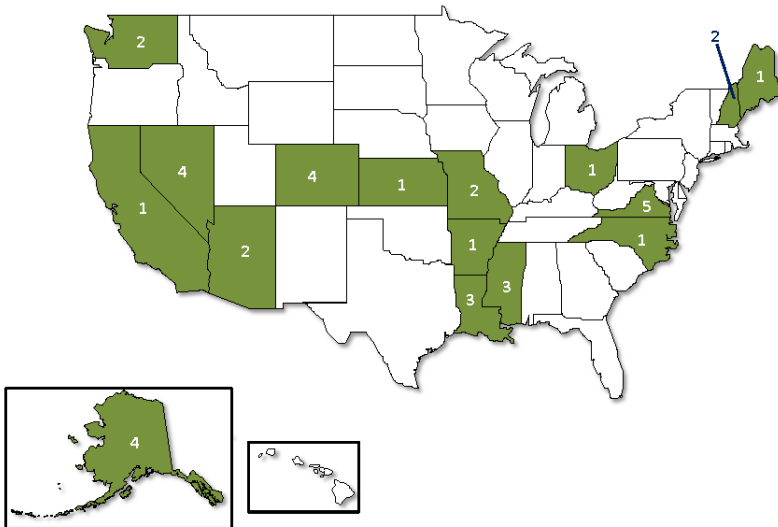
Distribution of In-Person Proctors: Basic Competency Exams
 Updated: November 2021



1

2 **Proctors per state – Professional Certification Exams:**

Distribution of In-Person Proctors: Professional Certification Exams
 Updated: November 2021



3

4 The table below shows the number of virtual and in-person proctored tests completed in FY 20-21.

5

	Proctoring	
	In-person	Virtual
Professional Certification	86	11
Basic Competency Certification	49	2

6

1 **Status of Current Tests**

2 The NCWM has issued 1168 professional certificates over the past ten years of the Professional Certification Program
 3 and 1212 since program inception through September 30, 2021. Of the certificates issued, twelve have been issued to
 4 individuals in the private sector. There has been a significant decline in participation in the program. It appears that
 5 the decline coincides with the requirement to proctor exams and the pandemic. Some of the certificates have reached
 6 their 5-year expiration and certificate holders will need to seek recertification. Several certificates were extended by
 7 the Board of Directors to September 2021 to accommodate the difficulties associated with the pandemic.

8 **NCWM Professional Certificates**

9 The table below shows the number of certificates awarded over the past ten years and the cumulative total since
 10 program inception.

	FY 11-12	FY 12-13	FY 13-14	FY 14-15	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Certificates Awarded	94	105	62	198	140	142	257	53	57	60
Cumulative	138	243	305	503	643	785	1042	1095	1152	1212

11
 12 The table below shows the states using the professional certification program and the number of certificates earned
 13 since program inception and includes expired certificates. The Committee applauds these states and encourages
 14 increased use of the certification program.

State	Certificates	State	Certificates	State	Certificates
Minnesota	153	Arizona	28	Pennsylvania	7
Missouri	143	Nevada	27	Wyoming	7
Wisconsin	95	Maine	26	Arkansas	6
Maryland	77	New Mexico	25	Delaware	4
Louisiana	74	New York	19	Michigan	3
Virginia	70	Colorado	18	South Dakota	3
Mississippi	56	Connecticut	15	Oregon	2
North Carolina	52	Ohio	14	Tennessee	2
Washington	50	Indiana	13	Montana	1
Alaska	50	Private	12	New Hampshire	1
Kansas	46	Idaho	11	West Virginia	1
California	41	Massachusetts	11		
Nebraska	33	Vermont	8		

15
 16 **NCWM Basic Competency Certificates**

17 The table below shows the number of basic competency certificates awarded since program inception.

	FY17-18	FY18-19	FY19-20	FY20-21	Cumulative
Basic - Measuring	0	40	14	12	66
Basic - Weighing	1	24	11	5	41
Total Awarded	1	64	25	17	107

18 The table below shows those states with individuals holding a basic competency certificate. The Committee applauds
 19 these states and encourages increased use of the certification program nationwide

State	Certificates	State	Certificates
Louisiana	45	Florida	3
Tennessee	42	Nevada	2
Alaska	6	Arkansas	1
Colorado	5	Kansas	1

1 **NCWM Meeting Comments:**

2 NCWM 2022 Interim Meeting: The 2022 Interim Meeting was held in an in-person and online hybrid meeting format.
 3 Mr. Jerry Buendel (Certification Coordinator) briefed the members on the results of the FY 21 certification program.
 4 He also suggested that the members consider using NCWM to administer their service agent exams. He noted that
 5 NCWM has over 1100 questions in the test bank that can be used to build exams and suggested that NCWM could
 6 host state specific regulatory questions in their database to use in the exams. Mr. Buendel stated that he has spoken
 7 to service companies that would welcome the opportunity to take a licensing exam that was acceptable to several
 8 states. He indicated that he is available to discuss the possibilities with interested jurisdictions.

9 No comments were heard during the open hearing.

10 The members reviewed the post exam surveys provided by NCWM during the committee agenda review on January
 11 9, 2022.

12 NCWM 2021 Interim Meeting: The 2021 Interim Meeting was held virtually and immediately following the
 13 conclusion of the NCWM 2020 virtual meeting.

14 Mr. Robert Huff (DE) asked if NCWM had considered removing the requirement for proctoring. Mr. Hal Prince (FL)
 15 indicated the Board discussed this possibility and the suspension of this requirement would jeopardize the integrity of
 16 the exams and would preclude ever reaching accreditation. We are actively pursuing online proctoring and are hopeful
 17 this is something that can be offered soon. Mr. Huff pointed out the decline in participation is obvious and those that
 18 would like to renew are quite possibly unable to do so. Mr. Ethan Bogren (Westchester Co., NY) indicated his support
 19 for exploring remote proctoring and that currently, lack of access to proctoring is preventing access to the exams for
 20 his jurisdiction. Mr. Brogan continued to suggest if access to the exams and/or proctoring was offered as a benefit of
 21 NCWM membership, it could be of value to inspectors, and promote growth of the membership. Ms. Kristin Macey
 22 (CA) asked how remote proctoring would work. Mr. Jerry Buendel (Certification Coordinator) indicated there are
 23 several providers and tiers of service and they are all being explored. Ms. Angela Godwin (Ventura Co., CA) indicated
 24 remote proctoring is a real need.

25 During the committee work session on January 14, 2021, the members reviewed the post exam surveys provided by
 26 NCWM. Mr. Buendel compiled the results and presented the information to the committee. The Committee observed
 27 that too few examinees were reviewing the learning objectives in the respective exam module prior to taking the exam.
 28 The Committee recommended a review the NCWM website to determine if examinees were clearly instructed to
 29 review the modules and if the modules were easily accessible. Two survey respondents indicated that it would be
 30 beneficial to have a two-step process to indicate that they had completed the section and that their submissions were
 31 final. Mr. Paul Floyd (LA) commented that Louisiana was requiring more inspectors to take exams. Mr. Floyd noted
 32 that the inspectors had a better grasp of the principles of operation and device exam requirements and as a result were
 33 doing more thorough inspections and were more confident in their findings and determinations.

34 The members of the Professional Development Committee also discussed the expiration dates of individual
 35 certifications during the work session. The Committee recommends that the Board of Directors take action to extend
 36 the dates of all certifications expiring between March 2020 and August 2021 to September 2021. The Committee
 37 recognized the difficulties of taking the exams because of restrictions caused by the pandemic as well as the barriers
 38 associated with proctoring. The Committee noted that some jurisdictions or service companies may be using the
 39 exams to justify promotions or require an employee maintain current certification(s) in order to maintain their current
 40 job classification and salary. Mr. Jerry Buendel (Certification Coordinator) stated that the tests are reviewed annually
 41 to determine if any changes made to the Handbooks would require changes to the exam questions. Mr. Buendel went
 42 on to say that in the past three years, he has made only two changes to current exam questions. The Committee also
 43 discussed the precedent that would be set by extending the expiration and concluded that the current extraordinary
 44 circumstances warrant an extension.

1 NCWM 2021 Annual Meeting: The 2021 Annual Meeting was held in an in person and online hybrid meeting session.
 2 Comments were received in person and from members online. Several comments were heard about the difficulty and
 3 scope of the exams, particularly when qualifying Registered Service Agents (RSAs). Mr. Scott Simmons (CO)
 4 reported that Colorado tried to use the measuring basic competency exam as part of their RSA licensing program. Of
 5 the three service companies that had technicians attempt the exam, there was a high failure rate and Colorado
 6 concluded that it was too difficult, and too broad in scope for the purpose of RSA licensing. Mr. Simmons suggested
 7 that an exam that was narrower in scope could be used for testing RSAs in Colorado. Mr. Greg VanderPlaats (MN)
 8 said that the basic competency exams are too broad for use in registering or licensing service technicians, specifically
 9 those who specialize in a single device type or class. They also do not charge their RSAs when testing, so moving to
 10 the NCWM test would result in incurring a charge that does not currently apply. Mr. VanderPlaats also thanked the
 11 Board for approving virtual proctoring and encouraged their continued use. Mr. Kevin Schnepf (CA) added that the
 12 general basic competency exams would not work for state licensing requirements and suggested the exams be written
 13 for specific device types. Mr. David Boykin (NCR) stated the basic competency exam was too broad. NCR deals
 14 with POS systems and the exam covers devices not serviced by NCR technicians. Mr. Loren Minnich (KS) testified
 15 that the state laws and regulations were a barrier to using the current basic competency exams. There is some
 16 privatization in Kansas and some businesses service very specific device types such that a general exam would not
 17 always be appropriate and in some cases, Kansas provides a special exam. Mr. Minnich suggested that there be a
 18 way to mark questions during an exam that the test taker thought should be reviewed by NCWM for clarity and
 19 consistency.

20 Mr. Minnich asked about the importance of accreditation. Mr. Jerry Buendel (Certification Coordinator) explained
 21 that accreditation would give the program additional credibility and would assure that we have rigorous processes in
 22 place to operate the testing program.

23 Mr. Paul Floyd (LA) suggested the exams and questions be reviewed periodically and was concerned about the
 24 question review process's impact on accreditation. Mr. Tim Chesser (AR) asked what certification meant and why
 25 certifications are good for five years. Mr. Buendel explained that certification demonstrates a thorough understanding
 26 of the national technical requirements and their application in regulatory inspections. Five years was selected based
 27 on the rate of change to the Handbooks and logical best fit for time between tests.

28 Mr. Kurt Floren (Los Angeles Co., CA) suggested we consider dividing exams to have one section cover specific
 29 devices and another section tailored to cover a jurisdiction's laws and regulations both exams should include input
 30 from the respective state. For example, there could be a pool of 100 questions, and the state could select from these
 31 and add their own state-specific requirements questions.

32 Mr. Chesser asked where we found Subject Matter Experts (SMEs). Mr. Buendel stated that there are various means
 33 of identifying SMEs including a request for assistance via the list serve, participation in the conference, and by their
 34 reputation in the weights and measures community.

35 Ms. Cheryl Ayer (NH) asked if it would be best to have some weights and measures officials take the competency
 36 exams so they can see what it entails to determine whether or not it will serve well for their service agents. Mr.
 37 Buendel appreciated the suggestion and agreed that it would be helpful.

38 Ms. Tina Butcher (NIST OWM) shared that there has been some reluctance from state weights and measures officials
 39 to use the same test for state inspectors and RSAs. The Committee also heard comments that some jurisdictions have
 40 privatized and/or delegated some functions to RSAs.

41 During its work session, the Committee decided to recommend the Board of Directors consider authorizing a work
 42 group to investigate further refining the NCWM testing program to include licensing programs for RSAs that could
 43 be utilized by individual states. This work group could address such issues as the need for additional, more specific
 44 competency exams, and variations in jurisdictional requirements and how to address these to make the test more
 45 applicable to RSAs. The Committee also reviewed the results of the post exam surveys.

46 **Regional Association Comments:**

47 WWMA 2021 Annual Meeting: David Aguayo, San Luis Obispo County, CA requested additional comments from

1 the region regarding Registered Service Agent (RSA) exams for agents who service multiple jurisdictions through the
2 testing program offered by NCWM.

3
4 Mr. Kurt Floren, Los Angeles County, CA commented that RSA exams are tailored to California state laws and
5 regulations for the regions they service, and the exams through the NCWM are more general. He suggested that while
6 some of the core information should be consistent across exams, perhaps there should be a section or sections that
7 allow for information specific to the various jurisdictions. Cadence Matijevich, NV, agreed with Mr. Floren's
8 comments. Both acknowledged that certification and proctoring requirements would complicate the more
9 individualized approach but is worth consideration. Mahesh Albuquerque, Co, commented that the RSA exams should
10 cover only information that agents will need to conduct their business and not extraneous or additional questions not
11 related to their applications. Mr. Albuquerque generally supports the concept Mr. Floren and Ms. Matijevich
12 suggested.

13
14 The Committee recognizes the importance of developing certification programs for RSAs through the NCWM testing
15 program. The Committee recommends the NCWM Board of Directors support efforts to organize a task group to
16 further analyze and develop an action plan to move forward with a national RSA certification program

17 SWMA 2021 Annual Meeting: The PDC heard no comments on this item and recommends this item remains
18 informational.

19 NEWMA 2021 Interim Meeting: No Comments were heard during open hearings. The committee expressed
20 appreciation for the ongoing efforts of the NCWM Professional Certification Coordinator. The committee chair
21 provided membership with an update on available exams, and exams under development. Membership was also
22 updated regarding available remote proctoring for professional certification and basic competency exams.

23 CWMA 2021 Interim Meeting: Mr. Doug Rathbun (IL) provided information regarding college courses have a process
24 for proctoring exams online in which the individual uses his/her phone to scan a room to demonstrate that no cheat
25 sheets or other materials are available. He indicated this may be beneficial tool to use for the Professional Certification
26 Program. Mr. Loren Minnich (KS) representing the Board of Directors indicated they are close to having an online
27 proctoring option. Some beta testing has been done and the process is similar to what Mr. Rathbun described. Once
28 the details are complete, it should be an easy process to have online proctoring capabilities.

NEWMA Report: EDU-1

Regional recommendation to NCWM on item status:

- Recommend as a Voting Item on the NCWM agenda
- Recommend as an Information Item on the NCWM agenda
- Recommend as an Assigned Item on the NCWM agenda
(To be developed by an NCWM Task Group or Subcommittee)
- Recommend as a Developing Item on the NCWM agenda
(To be developed by source of the proposal)
- Recommend Withdrawal of the Item from the NCWM agenda
(In the case of new proposals, do not forward this item to NCWM)
- No recommendation from the region to NCWM
(If this is a new proposal, it will not be forwarded to the national committee by this region)

Comments and justification for the regional recommendation to NCWM: *(This will appear in NCWM reports)*

During the 2022 NEWMA Annual Meeting an update was provided. A review of available exams was conducted. The availability of free virtual proctoring for NCWM members was discussed. The committee hopes that the access to virtual proctoring will increase participation. Cheryl Ayers (New Hampshire) commented that their states IT policy will not allow an outside party access to employees' computers. Due to this policy virtual proctoring is not possible on department issued computers. Ms. Ayers wanted to know if this could possibly be an issue in other jurisdictions.

1 **EDU-2 I Training**

2 The purpose of this item is to share best practices and approaches to training in response to the broad training needs
3 of weights and measures jurisdictions and to serve as a link to various training materials on the web.

4 At the 2022 Interim Meeting, Mrs. Tina Butcher (NIST OWM) provided the following “Summary of NIST OWM
5 Training Conducted in 2021.” Mrs. Butcher also provided an update on plans for OWM training in 2022 and other
6 work underway at NIST to assist weights and measures jurisdictions and industry with legal metrology training.

Summary of NIST OWM Training Conducted in 2021			
Area/Course Name	Start Date	Location	No. of Students
Laboratory Metrology			
Fundamentals of Metrology & LAP Problems Preparation	1/12/21 & 5/11/21	Web-based	6
Regional Measurement Assurance Programs			
MidMAP	10/24/21	Web-based	25
NEMAP	08/02/21	Web-based	21
SEMAP	03/22/21	Web-based	32
SWAP	08/30/21	Web-based	25
WRAP	05/03/21	Web-based	22
Webinars			
Basic Uncertainty Concepts	05/20/21	Web-based	8
Contract Review	03/11/21	Web-based	8
Contract Review	07/29/21	Web-based	5
Document Control and Record Keeping	03/04/21	Web-based	10
Document Control and Record Keeping	07/22/21	Web-based	6
Info Hour – Assessing Field Standards for Calibration & Use (3 sessions: 6/22/21; 9/21/21; & 11/9/21)	06/22/21	Web-based	172
Software Verification & Validation	06/10/21	Web-based	9
State Laboratory Annual Submission Process	07/01/21	Web-based	58
Laws and Metric Program			
Packaging & Price Verification			
Handbook 130 – Examination Procedure for Price Verification <i>5 Sessions:</i> 1/21/2021; 2/16/2021; 4/14/2021; 7/14/2021; 10/1/2021	5 Sessions Jan to Oct 2021	Web-based	Total 178
Handbook 130 – Overview of the Uniform Packaging and Labeling Regulation <i>4 Sessions:</i> 2/17/2021; 4/15/2021; 7/15/2021; 10/7/2021	4 Sessions Feb to Oct 2021	Web-based	Total 156
Handbook 133 – How to Test Animal Bedding <i>4 Sessions:</i> 2/24/2021; 4/28/2021; 7/13/2021; 10/20/2021	4 Sessions Feb to Oct 2021	Web-based	Total 71
Handbook 133 – Overview of Handbook 133 <i>5 Sessions:</i> 2/18/2021; 4/19/2021; 7/27/2021; 8/26/2021; 10/14/2021	5 Sessions Feb to Oct 2021	Web-based	195
Weights and Measures Inspections – Evidence, Search and Seizure, and Due Process <i>5 Sessions:</i> 1/26/2021; 2/23/2021; 4/22/2021; 7/1/2021; 10/26/2021	5 Sessions Jan to Oct 2021	Web-based	Total 183
LPG (Propane) -Verifying the Net Contents of 20 lb Cylinders (Part 1) - NEW	4 Sessions Jun to Oct	Web-based	Total 338

4 Sessions: 6/30/2021; 7/26/2021; 8/24/2021; 10/21/2021	2021		
Metric Education			
Info Session – Metric Education Resources	05/22/21	Web-based	5
	09/11/21	Web-based	4
	09/29/21	Web-based	6
Info Session – Metric Estimation	08/14/21	Web-based	6
	09/15/21	Web-based	3
Measurement System Basics – SI and US Customary Units for Regulatory Officials	08/26/21	Webinar	23
Legal Metrology Devices			
No training seminars were offered in 2021.	--	--	--

1
2 The following includes a summary of training-related activities in each NIST OWM Program along with an update
3 on some of OWM’s general work in developing and providing legal metrology training.

4 **Laboratory Metrology Program**

5 The following summarizes activities in the NIST OWM Laboratory Metrology Program:

6 **General.** All Laboratory Metrology Program training classes were conducted virtually in 2021, with a total of 16
7 sessions and 407 students. The Lab Administration Workshop for laboratory metrologist was converted from an in-
8 person format to virtual.

9 **Regional Metrology Association Training.** All regional measurement assurance program (RMAP) training was
10 conducted virtually in 2021. After two years of virtual sessions, the Laboratory Metrology Program plans to resume
11 in-person RMAPs in 2022. OWM is holding abbreviated Fundamentals of Metrology Training at the end of SEMAP
12 and WRAP in 2022. This abbreviated training is specially designed for metrologist who took OWM’s online
13 Fundamentals of Metrology courses in 2020 and 2021 and will fill the gap between the online course and OWM’s
14 regular, in-person Fundamentals course.

15 **Laboratory Metrology Program Training in 2022.** The Laboratory Metrology Program is excited to begin opening
16 its doors for in-person training at NIST. OWM received a waiver from NIST’s Office of Safety, Health, and
17 Environment to hold small (limited to 4 participants), in-person classes starting January 31, 2022. Preference will be
18 given to metrologist from State/Local weights and measures programs for this in-person training. Additional
19 participants will be included in this training via a virtual format, thus creating a hybrid classroom environment.

20 **Laws and Metric Program**

21 **General.** The Laws and Metric Program conducted 27 webinars on topics related to “Laws and Regulations” in 2021,
22 this included 6 different topic areas as outlined in the tables above, with 27 sessions and 1121 students. These courses
23 were offered on a frequency based on the level of demand, but no less than once per quarter during the year. A new
24 webinar topic was added in June 2021 titled “LPG (Propane) – Verifying the Net Contents of 20 lb Cylinders – Part
25 1.” This new webinar is part of a series of three webinars. Part 2 and Part 3 of this series are being further developed
26 and will be offered later in 2022.

27 The Laws and Metric Program also conducted 6 webinars on the topic of “Metric Education;” this included 6 sessions
28 as described in the tables above with 47 students.

29 “In-person” classes have been postponed until further notice, but options are being explored for different training
30 options until in-person classes can resume.

1 **Legal Metrology Devices Program**

2 **General.** No webinars were presented by the Legal Metrology Devices Program (LMDP) in 2021. However, several
3 new webinars/courses are in development:

- 4 • Reference Scale Verification for Gravimetric Testing
- 5 • Electric Vehicle Fueling Systems Inspection and Testing
- 6 • Retail Motor-Fuel Dispensers Inspection and Testing

7 As with the Laws and Metric Program, “in-person” classes for field inspection applications have been postponed until
8 further notice. However, the Legal Metrology Devices Program is exploring options for “hybrid” and “blended” class
9 formats, which may combine virtual sessions with limited in-person options.

10 The Legal Metrology Devices Program plans to implement “information hour” type educational sessions in 2022
11 patterned after those used in the past by the Laboratory Metrology Program. These sessions will focus on presenting
12 information on a few select topics, followed by a question and answer session. Topics will be selected from questions
13 OWM has received from officials and industry on various field inspection issues and new inspection areas in the
14 marketplace. OWM will also solicit ideas from the community on future topics. OWM technical staff members Lisa
15 Warfield and Rick Harshman will be developing a format, timeline, and initial topic areas for these sessions.

16 The LMDP also plans to expand available informal learning tools targeted toward field inspection topics. This
17 includes adding to existing tools such as study guides, examination procedure outlines, field manuals, and videos as
18 well as exploring the development of new tools such as checklists and frequently asked questions to assist in field
19 inspections.

20 **General – OWM Training**

21 Mrs. Butcher summarized the following statistics for OWM’s 2021 training as follows:

- 22 • 50 classes presented virtually in Lab Metrology and Laws & Metric Programs
- 23 • 1575 total number of students
- 24 • Training includes regulators and industry and an increased interest from international participants

25 Mrs. Butcher provided an overview of OWM’s training looking forward in 2022. She noted that OWM is beginning
26 to consider options for returning to in-person training. This may begin with limited in-person participants such as
27 provided by the Laboratory Metrology Program onsite at NIST and expanding to include hybrid and blended options
28 involving both virtual and in-person participants.

29 In-person options will be dependent on pandemic conditions and consider the conditions at the site where training will
30 be conducted as well as travel restrictions that may apply to trainers and students. The impact of social distancing
31 requirements on classroom size and configuration and ability to present to groups may also impact training. OWM
32 will continue to reassess these options as the pandemic situation continues to evolve.

33 While OWM fully plans to resume offering in-person training courses when conditions permit, Mrs. Butcher reported,
34 OWM has no intention of eliminating, virtual training options. OWM has reached a significantly larger number of
35 students with virtual training and students who have never had the opportunity to attend NIST OWM training in the
36 past have been able to access training because of the virtual format. Virtual training also offers advantages of
37 flexibility and reduced costs to learners as well as trainers and makes offering multiple sessions of a given course
38 more practical.

39 OWM plans to expand virtual training to include additional topics on field inspection, particularly on device-related
40 topics and will actively explore “hybrid” and “blended” learning options. This might include options such as:

- 41 • Some students attend virtually and some attend in-person;
- 42 • Some portions of class are presented in an in-person format (with smaller size classes) and some portions of
43 class are presented virtually (with larger class sizes); and
- 44 • Exploring “synchronous” and “asynchronous” formats enhanced with pre-recorded lecture and/or video.

1 These options will likely continue even after OWM returns to in-person training.

2 OWM will also be experimenting with available technology and tools to best incorporate elements of “hands on” in
3 field inspection training, recognizing the importance of that “hands on” or “experiential learning” component for field
4 inspection work.

5 Mrs. Butcher has previously shared plans at NIST to create a “Virtual Training Studio.” She reported this project is
6 well underway with significant monetary and facility support from OWM’s parent operating unit, the Physical
7 Measurement Laboratory. This will include outfitting a virtual training space in NIST OWM offices for delivering
8 virtual training and hosting web-based meetings such as work groups and standards development sessions. This
9 “studio” will result in a mid-level space for:

- 10 • Conducting virtual training;
- 11 • Conducting live demonstrations;
- 12 • Video recording and editing;
- 13 • Enhancing livestream capabilities;
- 14 • Hosting and/or participating in virtual meetings as individuals or as a group; and
- 15 • Enable high levels of interactivity with off-site participants with capability to concurrently, view remote
16 participants.

17 OWM is presently conducting a bid process for the design and build of the studio. This studio will also enhance
18 OWM’s virtual training events and its capability to develop training videos.

19 Mrs. Butcher reported OWM recently posted a position (which will be shared with another NIST division) for an
20 Audio Visual Production Specialist to oversee these activities targeted in the Virtual Studio project. OWM is excited
21 to fill this position and further extend OWM’s ability to provide virtual training events as well as enhance both virtual
22 and in-person training.

23 Mrs. Butcher reported that OWM trainers are actively participating in their own professional development through
24 participation in a variety of training courses and activities focused on enhancing their abilities in training design,
25 development, and delivery, with particular emphasis on virtual and hybrid training venues.

26 Mrs. Butcher will continue to provide updates to the Committee and NCWM members at future meetings about
27 available OWM training and future training plans. In the meantime, she reminded those interested in OWM training,
28 to periodically consult the OWM Calendar of Events for upcoming training at the following link on the OWM website:

29 <https://www.nist.gov/pml/weights-and-measures/about-owm/calendar-events>

30 NIST OWM looks forward to continued work with the weights and measures community to develop and implement
31 training to assist weights and measures officials and service personnel in their continued professional development.

32 **NCWM Meeting Comments:**

33 NCWM 2022 Interim Meeting: The 2022 Interim Meeting was held in an in-person and online hybrid meeting format.
34 Ms. Tina Butcher (NIST OWM) gave a presentation on EDU -2. Information was provided on NIST Office of Weights
35 and Measures (OWM) trainings offered in 2021 along with upcoming trainings in 2022 as outlined above. Updates to
36 the laboratory metrology program, laws and metric program, legal metrology device program, and field inspection
37 trainings through NIST OWM were provided. Ms. Butcher provided comments on possible in-person training with
38 class sizes limited to four (4) persons. NIST OWM is exploring hybrid-learning options, the possible offering of videos
39 and on demand trainings to meet future training needs. Ms. Butcher reported NIST OWM is in the process of creating
40 an on-site training studio to enhance virtual training and production of training videos.

41 No comments were received during the open hearings.

42

43 NCWM 2021 Interim Meeting: The 2021 Interim Meeting was held virtually and immediately following the

1 conclusion of the NCWM 2020 virtual meeting. Ms. Cheryl Ayer (NH) asked if NIST OWM was continuing work
2 on providing an on-demand video for small capacity scale field inspection. Dr. Doug Olson (NIST OWM) and Ms.
3 Tina Butcher (NIST OWM) both indicated the plan was to continue that project. Multiple comments from the
4 membership were heard thanking NIST OWM for the training provided. The comments indicated this training was
5 invaluable during the pandemic.

6 NCWM 2021 Annual Meeting: The 2021 Annual Meeting was held in an in person and online hybrid meeting session.
7 Comments were received in person and from members online. During the 2021 Annual Meeting open hearings an
8 updated presentation was given on NIST training activity. The updates are included in Appendix B of this report.

9 Ms. Cheryl Ayer (NH) indicated her support for hybrid and virtual training and pointed out that there is cost savings
10 with no need to travel, etc.

11 **Regional Association Comments:**

12 WWMA 2021 Annual Meeting: Ms. Tina Butcher, NIST OWM, commented that NCWM PDC has requested a
13 summary of NIST trainings each July. A list of trainings from 2019 is included in agenda for this Annual meeting.
14 She commented that online training is ongoing, but no in-person training is currently being conducted. She anticipated
15 that in-person trainings would be offered in the future.

16
17 While online training has been especially valuable during the pandemic, the Committee looks forward to the offering
18 of in-person trainings.

19 SWMA 2021 Annual Meeting: The PDC heard no comments on this item and recommends this item remains
20 informational.

21 NEWMA 2021 Interim Meeting: Ms. Tina Butcher (NIST OWM) gave a brief update from NIST OWM. NIST is
22 not currently offering any in person training at this time and there are no in person trainings on the schedule. NIST
23 has been able to offer numerous virtual web-based trainings to jurisdictions in both the metrology and legal metrology
24 devices fields. She also commented on the great progress taking place on the training studio being planned by NIST
25 which will enhance the availability and quality of virtual trainings that can be offered. Mr. David Sefcik (NIST OWM)
26 gave an update of the NIST training studio. He stated that great progress is being made in moving this forward. There
27 is full commitment and support from NIST management, and all equipment has been purchased. NIST is waiting on
28 a remodel of the building which may take 1-2 years, however that does not prevent NIST staff from working and
29 practicing with the purchased equipment. The goal is to improve the quality and availability of virtual web-based
30 trainings that can be offered, and this will continue to be a work in progress.

31 CWMA 2021 Interim Meeting: Ms. Tina Butcher (NIST OWM) provided an update from NIST indicating that all
32 training is currently being done virtually but will resume in-person once pandemic restrictions have been lifted. She
33 noted that each July the NCWM PDC has requested a summary of NIST OWM training for the prior calendar year.
34 A summary of OWM's 2020 training is included in the CWMA's agenda along with a breakdown of training provided
35 in each of the three OWM programs which provide training. Ms. Butcher informed the committee that NIST will
36 provide an update on a summary of trainings for a calendar year. Currently, three of the four training programs within
37 the OWM provide virtual training. Ms. Butcher indicated that Laboratory Metrology may be the first to return to in-
38 person training but is currently exclusively virtual and will keep a virtual presence in the future in addition to in-person
39 trainings. She informed the committee the Legal Metrology Devices Program does not do webinar-based trainings but
40 did develop study guides and other resources for study and skill development. NIST has been working to create a
41 virtual training studio to host webinars and create videos to be used for trainings and is expected to be complete in the
42 next year and half. Ms. Butcher encouraged members to look for training opportunities frequently as the list of
43 available trainings is updated regularly on NIST's website. Mr. Charles Stutesman (KS) commented that he
44 appreciates the work of the NIST trainers but has realized the pandemic has brought to light that certain trainings are
45 needed that cannot be done virtually such as vehicle scale, LPG bulk truck, etc. Mr. Stutesman indicated he would
46 like NCWM to begin developing training programs utilizing the subject matter experts found within its membership.
47 He reminded the committee of the distinction between professional certification and trainings and would like the PDC
48 to move forward with generating training materials. Mr. Mike Harrington (IA) complimented the NIST trainings that
49 have been made available, specifically mentioning the Evidence Search and Seizure class, which he recommends to
50 all inspectors. He also agreed that in-person training offers things that virtual trainings cannot. Mr. Doug Rathbun

1 (IL) indicated that during the CWMA executive meeting it was made known the CWMA has a fair amount of funds
2 available that may be utilized for in-person training within the Central region. Ms. Tina Butcher (NIST OWM)
3 concurred with previous commenters that there is a lot of expertise in the community and that a vast amount of training
4 is provided informally, and informal training holds a critical place in professional development.

NEWMA Report: EDU-2	
Regional recommendation to NCWM on item status:	
<input type="checkbox"/>	Recommend as a Voting Item on the NCWM agenda
<input checked="" type="checkbox"/>	Recommend as an Information Item on the NCWM agenda
<input type="checkbox"/>	Recommend as an Assigned Item on the NCWM agenda <i>(To be developed by an NCWM Task Group or Subcommittee)</i>
<input type="checkbox"/>	Recommend as a Developing Item on the NCWM agenda <i>(To be developed by source of the proposal)</i>
<input type="checkbox"/>	Recommend Withdrawal of the Item from the NCWM agenda <i>(In the case of new proposals, do not forward this item to NCWM)</i>
<input type="checkbox"/>	No recommendation from the region to NCWM <i>(If this is a new proposal, it will not be forwarded to the national committee by this region)</i>
Comments and justification for the regional recommendation to NCWM: <i>(This will appear in NCWM reports)</i>	
During the 2022 NEWMA Annual Meeting a training update was provided by Tina Butcher (NIST OWM). In early 2022 NIST OWM was granted clearance to once again host limited in person training for legal metrology. Classes are limited to four students and one instructor. As the year progresses the hope is that less restrictive in person training with expanding subject matter will be available. A noted benefit of virtual training during the pandemic has been increased participation. More people have access to NIST administered training than ever before due to the availability of both synchronous and asynchronous training modules. NIST OWM is continuing work building a virtual learning studio in an effort to produce a more professional training product for participants. The expectation is that virtual training will continue to be available once in person training resumes in full.	

5

6 **EDU-3 I Instructor Improvement**

7 The Committee has reiterated multiple times in the past that the responsibility for the training employee rests with
8 individual organizations (weights and measures jurisdictions and industry alike). While NIST and other training
9 providers offer excellent sources of training and training materials, organizations must develop and manage their own
10 training programs, including developing trainers; establishing individual development plans for employees; and
11 identifying strategies for continually assessing and responding to training needs. The Committee recognizes that NIST
12 OWM cannot possibly train all weights and measures inspectors in the country. The state and municipal jurisdictions
13 have ultimate responsibility for training and qualifying their personnel. To fulfill this responsibility, jurisdictions
14 should be making individual plans to maintain or bolster their training efforts. NIST OWM should be viewed as one
15 vital resource to support that effort. The Professional Development Committee is another resource. The Committee
16 has created and posted on its website, the “Body of Knowledge” to establish uniform learning objectives for weights
17 and measures professionals. In addition, the Committee has posted a Model Field Training Program document on its
18 website. This program outlines methods to evaluate and document training and offers guidance on training new
19 inspectors and taking steps to ensure their ongoing development.

20 NIST OWM has also provided ongoing contributions to assist the community in the development of instructors. OWM
21 has provided legal metrology training for weights and measures jurisdictions and industry for many years but does not
22 have the resources to respond to the numerous training requests it receives. OWM has long recognized that there are
23 many individuals with extensive legal metrology experience who have the skills needed to provide this type of training.
24 OWM hopes to continue to draw from this pool to develop trainers who can present schools with NIST, thus leveraging
25 NIST resources; providing more timely classes; and providing a way to more broadly share the valuable expertise

1 these individuals possess. In the past ten years, NIST OWM has taken on more field inspection classes than it would
2 otherwise be able to do because of the co-instructors drawn from its current pool of trainers.

3 Mrs. Tina Butcher (NIST OWM) has regularly updated the Committee on instructor development work by NIST
4 OWM.

5 See the Committee's past reports for background information on this item along with other details on available tools
6 for trainer development and NIST OWM's efforts and partnership with the NCWM to continue this work.

7 **NCWM Meeting Comments:**

8 NCWM 2022 Interim Meeting: The 2022 Interim Meeting was held in an in-person and online hybrid meeting format.
9 Mrs. Tina Butcher (NIST OWM) gave a presentation on EDU-3. She reported no new work was done by NIST in the
10 area of instructor improvement in 2021. This was solely due to pandemic-related interruption of in-person NIST
11 OWM training events. The NIST OWM plans to continue collaboration efforts with external trainers in 2022.

12 As noted during past updates, Mrs. Butcher emphasized that OWM sincerely appreciates the time and resources
13 committed by these trainers and their organizations in support of this important partnership and the expertise that these
14 trainers bring to NIST training events and looks forward to continued collaboration. OWM will continue to provide
15 the Committee with updates on its progress as well as continue to collaborate with and support the Committee in its
16 work.

17 No comments were received during the open hearings.

18

19 NCWM 2021 Interim Meeting: The 2021 Interim Meeting was held virtually and immediately following the
20 conclusion of the NCWM 2020 virtual meeting. Ms. Tina Butcher (NIST OWM) indicated that, due to continued
21 restrictions brought about by the COVID-19 pandemic there have been no changes in the status of NIST OWM's work
22 in this area from what was reported during the Committee's July 2020 Virtual Technical Sessions. The Committee
23 received no comments during the open hearing on this item.

24 NCWM 2021 Annual Meeting: The 2021 Annual Meeting was held in an in person and online hybrid meeting session.
25 The Committee received no comments during the open hearing on this item.

26 **Regional Association Comments:**

27 WWMA 2021 Annual Meeting: During the 2021 WWMA Annual Meeting the following comments were received:
28 Ms. Tina Butcher, NIST OWM commented that they work continuously throughout the year to develop new trainers.
29 She reports that they intend to return to full cooperation with training partners post-pandemic. Ms. Butcher further
30 commented that she appreciated the efforts of all regional support training throughout the year.

31

32 The Committee continues to support the efforts of NIST and their training partners.

33 SWMA 2021 Annual Meeting: The PDC heard no comments on this item and recommends this item remains
34 informational.

35 NEWMA 2021 Interim Meeting: No Comments were heard during open hearings. Due to ongoing COVID related
36 restrictions there has not been much activity on this item.

37 CWMA 2021 Interim Meeting: Ms. Tina Butcher (NIST OWM) provided a brief update on NIST OWM activities in
38 the area of "Instructor Improvement." Because OWM's Instructor Training Program is largely structured around in-
39 person training events, little has been done in this area since the restrictions imposed by the COVID-19 pandemic on
40 OWM's offering of in-person training. Ms. Butcher indicated that OWM remains fully committed to supporting
41 instructor training and expects to resume this collaborative work once in-person training resumes. OWM is also
42 considering whether there might be opportunities to collaborate with its current corps of co-instructors in a hybrid
43 format, possibly including virtual training for portions of a class in conjunction with a hands-on training portion

1 conducted by co-instructors in their areas. She expressed continued appreciation to these trainers for sharing their
 2 time and expertise and to their administrators for allowing them to devote time in support of this program. Mr. Charles
 3 Stutesman (KS) commented he would like to see the conference utilize the persons that have completed the train the
 4 trainer programs and have been determined as subject matter experts to conduct trainings. He indicated that using
 5 those subject matter experts in that way will help fill the gaps in areas that have been exposed as in-person training
 6 needs due to the pandemic and travel restrictions.

NEWMA Report: EDU-3
<p>Regional recommendation to NCWM on item status:</p> <p><input type="checkbox"/> Recommend as a Voting Item on the NCWM agenda</p> <p><input checked="" type="checkbox"/> Recommend as an Information Item on the NCWM agenda</p> <p><input type="checkbox"/> Recommend as an Assigned Item on the NCWM agenda <i>(To be developed by an NCWM Task Group or Subcommittee)</i></p> <p><input type="checkbox"/> Recommend as a Developing Item on the NCWM agenda <i>(To be developed by source of the proposal)</i></p> <p><input type="checkbox"/> Recommend Withdrawal of the Item from the NCWM agenda <i>(In the case of new proposals, do not forward this item to NCWM)</i></p> <p><input type="checkbox"/> No recommendation from the region to NCWM <i>(If this is a new proposal, it will not be forwarded to the national committee by this region)</i></p>
<p>Comments and justification for the regional recommendation to NCWM: <i>(This will appear in NCWM reports)</i></p> <p>During the 2022 NEWMA Annual Meeting instructor improvement was discussed. This item has had little movement due to the lack of in person training during the pandemic. As in person training is expected to increase moving forward the committee is hopeful that so will feedback regarding instructor improvement. No comments were heard from the floor.</p>

7

8 **EDU-4 I Recommended Topics for Conference Training**

9 The Board of Directors has charged the Committee with recommending appropriate topics for the technical sessions
 10 at future annual meetings. The Board of Directors asks the PDC to review and prioritize possible presentation topics
 11 and to submit those to the NCWM Chairman. The Chairman will coordinate with NCWM staff to secure presenters.

12 The following is a list of technical presentations made at the NCWM since 2009. Presentations given since 2010 are
 13 available at www.ncwm.com/annual-archive.

- 14 • Planning and Coordinating a National Market Place Survey (Ms. Rachelle Miller, WI, 2017)
- 15 • The Life Cycle of Petroleum from Well to Retail (Mr. Prentiss Searles, API 2017)
- 16 • The United States Mint at Denver – Gold, Coins and Embezzlement (Mr. Thomas Fesing, 2016)
- 17 • Understanding Transportation Network Systems (Ms. Andrea Ambrose Lobato, Lyft and Mr. Bob O’
- 18 Leary, Uber 2016)
- 19 • Regulatory Consideration for Legalized Marijuana (Ms. Julie Quinn, MN, and Mr. Nick Brechun, CO,
- 20 2016)
- 21 • Motor Oil Quality Violations (Mr. Tom Glenn, Petroleum Quality Institute of America, 2014)
- 22 • Making Sense of Electronic Receipts (Mr. Justin Hotard, Vice President and General Manager, NCR
- 23 Corporation, 2014)
- 24 • LNG & CNG Motor Fuel – A Technical Briefing from Industry (Mr. Doug Horne, President CVEF, Mr.
- 25 Zack Wester, Blu, Mr. Jeff Clarke, NGVA, 2014)
- 26 • Taximeter Technology Advancements (Mr. Matt Daus, International Association of Transportation
- 27 Regulators, 2013)

- 1 • Advanced Vehicles and Fuel Quality (Mr. John M Cabaniss, Jr., Association of Global Automakers, 2013)
- 2 • Economic Justification and Demonstrating Value of Weights and Measures (Mr. Tim Chesser, Arkansas
- 3 Bureau of Standards, 2012)
- 4 • Conducting Effective Marketplace Surveys and Investigations (Ms. Judy Cardin, Wisconsin Weights and
- 5 Measures, 2012)
- 6 • Public Relations and Customer Service as Regulators (Mr. Doug Deiman, Alaska Division of Measurement
- 7 Standards/CVE, 2012)
- 8 • An Overview of Unit Pricing in the United States (Mr. David Sefcik, NIST OWM, 2011)
- 9 • Grocery Unit Pricing in Australia (Mr. Ian Jarratt, Queensland Consumers Association, 2011)
- 10 • Grocery Unit Pricing in Canada (Mr. Ian Jarratt, Queensland Consumers Association, 2011)
- 11 • The U.S. Hydrogen Measuring System: The Turning Point? (Ms. Kristin Macey, California Division of
- 12 Measurement Standards, 2011)
- 13 • Corrosion in Ultra Low Sulfur Diesel Underground Storage Systems (Mr. Prentiss Searles and Ms. Lorri
- 14 Gainawi, American Petroleum Institute, 2010)
- 15 • Risk-Based Inspection Schemes (Mr. Henry Oppermann, Weights and Measures Consulting, LLC, 2010)
- 16 • Diesel Exhaust Fluid (DEF) (Mr. Gordon Johnson, Gilbarco, Inc., and Mr. Randy Moses, Wayne, 2009)
- 17 • Fuel Volatility and Ethanol Blending (Mr. Jim McGetrick, BP Products, 2009)
- 18 • Investigative Techniques (Mr. Michael Cleary, Retired, 2009)

19 At the Interim Meeting 2019 the following suggestions from the floor for additional topics were received:

- 20 • Investigative reporting
- 21 • D.E.F. Testing requirements, special considerations (handling, safety, equipment)
- 22 • Differentiation between weight classifier and normal rounding scales
- 23 • Organizing/publishing existing training materials

24 **NCWM Meeting Comments:**

25 NCWM 2022 Interim Meeting: The 2022 Interim Meeting was held in an in-person and online hybrid meeting format.
 26 Mr. Ethan Bogren (Westchester Co., NY) gave a presentation on EDU-4. An overview of recommended topics for
 27 conference training was provided to members. Previous training topics were discussed and recommendations were
 28 solicited for future training topics.

29 No comments were received during the open hearings.

30

31 NCWM 2021 Interim Meeting: Meeting was held virtually and immediately following the conclusion of the NCWM
 32 2020 virtual meeting.

33 Ms. Tina Butcher (NIST OWM) offered to develop a technical presentation related to the work their office is doing
 34 with master meters. Ms. Cheryl Ayer (NH) and Ms. Rachelle Miller (WI) expressed interest. Mr. Charles Stutesman
 35 (KS) suggested NIST training on the gravimetric proving process and suggested training on the use of error weights
 36 would be valuable.

37 NCWM 2021 Annual Meeting: The 2021 Annual Meeting was held in an in person and online hybrid meeting session.
 38 PDC member, Mr. Ethan Bogren (Westchester Co., NY) provided an update to recommended topics from previous
 39 NCWM and Regional Association meetings.

- 40 • Training on gravimetric testing of motor oils
- 41 • Training on mass flow meters/master meters
- 42 • Training on Class II scales for jewelry and cannabis
- 43 • Review of NTEP Organization, Processes, and Certificate system
- 44 • Training on method of sale and gravimetric testing for LPG/Propane bottle filling
- 45 • Training on testing of EV charging stations

46 The Committee received no comments during the open hearing on this item.

1 **Regional Association Comments:**

2 WWMA 2021 Annual Meeting: During the 2021 WWMA Annual Meeting the following comments were received:
3 David Aguayo, San Luis Obispo County, CA stressed the importance of continuous training, and encourages the
4 Committee to provide additional training a opportunities in the regional and national standard setting process. He also
5 encouraged development of training for regional committee members including incoming regional committee chairs.
6 Cadence Matijevich, Nevada, commented that she was encouraged to hear Dr. Lippa’s update on regulation related to
7 electrification, EV vehicle, its infrastructure and stressed that it will be very important as we move forward.

8
9 Based on input collected from various standing committee members, the PDC believes there is a need for committee
10 training that is held separate from and prior to the region’s annual meeting. The Committee recommends that the
11 Western Weights and Measures Association Board of Directors consider developing a task group for the development
12 of a WWMA committee member and leadership workshop prior to the 2022 WWMA Annual Meeting in Orange
13 County, CA

14 SWMA 2021 Annual Meeting: Mr. Tim Chesser (AR) suggested regional committee training for members of the
15 committees for all four regions. Mr. Steven Benjamin (NC) suggested all states consider following Louisiana’s
16 reallocation/pay increase process based on NCWM exams.

17 NEWMA 2021 Interim Meeting: The committee heard comments from Mr. Jimmy Cassidy (MA) that several topics
18 are current and may impact NEWMA regions, stressing the certain growth of Electrical Vehicle Charging Equipment
19 (EVCE) and issues with the sale of Cannabis. He supported these topics on both a national and regional basis and
20 supports additional conversations that NEWMA can have to support regional training in these areas. Mr. Marc
21 Paquette (VT) made comments also supporting EVCE and Cannabis as training topics on both a national and regional
22 basis. He stated that VT is in the process of planning for the eventual testing and inspection of EVCE and is working
23 through the legislative process for funding to purchase the testing equipment and additional staff. VT has made a
24 significant investment in expanding the number of EVCS and will continue to do so. VT also hopes to provide
25 consumer protection in regard to the sale of cannabis through inspections and package weighing of the product.

26 CWMA 2021 Interim Meeting: Mr. Charles Stutesman (KS) suggested the topic of gravimetric testing for conference
27 training as well as the topic of understanding fuel quality analysis.

NEWMA Report: EDU-4

Regional recommendation to NCWM on item status:

- Recommend as a Voting Item on the NCWM agenda
- Recommend as an Information Item on the NCWM agenda
- Recommend as an Assigned Item on the NCWM agenda
(To be developed by an NCWM Task Group or Subcommittee)
- Recommend as a Developing Item on the NCWM agenda
(To be developed by source of the proposal)
- Recommend Withdrawal of the Item from the NCWM agenda
(In the case of new proposals, do not forward this item to NCWM)
- No recommendation from the region to NCWM
(If this is a new proposal, it will not be forwarded to the national committee by this region)

Comments and justification for the regional recommendation to NCWM: (This will appear in NCWM reports)

During the NEWMA Annual Meeting a review of previously stated training topics was discussed. Those topics include training on gravimetric testing of motor oils, training on mass flow meters, Class II scales for jewelry and cannabis, a review of the NTEP process and certification process, method of sale and gravimetric testing for LPG/ bottle filling, and testing of EV charging stations. No comments were heard from the floor.

1 **PMT – PROGRAM MANAGEMENT**

2 **PMT-1 I Safety Awareness**

3 One of the goals of the PDC is to educate jurisdictions on safety issues and to provide resources to help them
 4 implement effective safety and health management programs. The Committee intends to use the safety page at
 5 www.ncwm.com/safety as a place for states to share information and resources to help them address each of the
 6 major steps in creating and maintaining an effective safety program.

7 In July 2017, the Board of Directors created the Safety Task Group to create a safety tool kit to help weights and
 8 measures organizations create or improve their own safety programs. The toolkit is complete and is posted on the
 9 NCWM website at www.ncwm.com/safety.

10 At the 2018 Annual Meeting, the NCWM BOD decided to make the task group a permanent subcommittee associated
 11 with the PDC. The newly formed Safety Subcommittee will assume responsibility for:

- 12 • Maintaining and updating the safety toolkit.
- 13 • Writing and deploying the NCWM annual safety survey, as well as reporting on the results each year.
- 14 • Finding resources and/or developing weights-and-measures-focused materials relating to the top hazards
 15 identified through the safety survey or through developing the toolkit.
- 16 • Building a safety culture and developing safety leadership within the NCWM through participation on the
 17 Safety Subcommittee

18 The Safety Subcommittee is currently working to improve the annual safety survey by:

- 19 • Including questions about near-miss incidents and about incidents resulting in lost or restricted time over
 20 multiple years.
- 21 • Contacting counties and associate members to increase participation.
- 22 • Writing an instruction guide to help participants gather information they need before completing the survey.

23 The Committee expresses appreciation to the members of the Safety Subcommittee for their willingness to volunteer
 24 for this important work.

Safety Subcommittee Members		
Chair	John Bell	Missouri
Public Sector	Jason Flint	New Jersey
Public Sector	Mike Sikula	New York
Private Sector	Tisha Arriaga	Marathon Petroleum, LLC
Private Sector	Bill Callaway	Crompco
Private Sector	Remy Cano	Northwest Tank & Environmental Services
Private Sector	Robert LaGasse	Mulch and Soil Council

1 The NCWM safety page houses the list of regional safety liaisons and an archive of past safety articles.

2 **Regional Safety Liaisons:**

3 **Central Weights and Measures Association (CWMA)**

4 Mr. John Bell, Missouri Department of Agriculture

5 **Northeastern Weights and Measures Association (NEWMA)**

6 Mr. Michael Sikula, New York Bureau of Weights and Measures

7 **Southern Weights and Measures Association (SWMA)**

8 Robert Huff, Delaware Department of Agriculture

9 **Western Weights and Measures Association (WWMA)**

10 Mr. Remy Cano, Northwest Tank & Environmental Services

11 Each region is responsible for providing a safety article for the NCWM newsletter according to the following schedule:

Safety Article Schedule		
Issue 1 (February 2021)	CWMA	January 15, 2021
Issue 2 (May 2021)	NEWMA	April 15, 2021
Issue 3 (September 2021)	SWMA	August 13, 2021
Issue 1 (February 2022)	WWMA	January 15, 2022

12 The Committee would like to thank the following individuals for their contributions since the 2020 Annual Meeting:

- 13 • *The Psychology of Safety* – Mr. Ron Armstrong (NWTES)
- 14 • *Back to Your Health* – Ms. Elizabeth Koncki (MD)
- 15 • *Engineering Controls* – Mr. Mike Sikula (NY)
- 16 • *Avoid Hostile Encounters in the Field* – Mr. Mike Sikula (NY)
- 17 • *Who's Got Your Back?* – Mr. Ron Armstrong (NWTES)
- 18 • *Cannabis Facility Safety Awareness* – Mr. John Bell (MO)

19 **NCWM Meeting Comments:**

20 NCWM 2022 Interim Meeting: The 2022 Interim Meeting was held in an in-person and online hybrid meeting format.
21 Subcommittee Chair, Mr. John Bell (MO) briefed the members on activities of the Safety subcommittee. The
22 Subcommittee may meet between the annual and interim meetings to discuss issue and topics relating to safety. Mr.
23 Bell stated the Annual Safety Awareness survey is being revised and will be sent out to state directors once finalized.
24 Once comments are received, these will be consolidated for presentation at the 2022 Annual Meeting. A similar
25 survey may be developed and sent to industry giving them an opportunity to share their concerns anonymously. Mr.
26 Bell requested for himself or any member of the subcommittee to be contacted with any information, which may be
27 added to the webpage. Mr. Bell encouraged everyone to read the safety articles published on the NCWM website.

28 No comments were heard during the open hearing.

29 NCWM 2021 Interim Meeting: The 2021 Interim Meeting was held virtually and immediately following the
30 conclusion of the NCWM 2020 virtual meeting.

31 Mr. David Aguayo (San Luis Obispo, Co. CA) PDC Chair reviewed this item in the absence of the Safety
32 Subcommittee Chair, Ms. Lori Jacobson (SD). The Committee expressed appreciation to all the regional safety
33 representatives for their continued contributions. The CWMA Regional Safety Liaison position is currently vacant.
34 Individuals interested in serving in this capacity should contact the CWMA Chair or Board member.

35 The Committee expresses its appreciation to Ms. Brenda Sharkey (SD) who was the previous CWMA representative
36 for her work.

1 No comments were heard during the open hearing.

2 NCWM 2021 Annual Meeting: The 2021 Annual Meeting was held in an in person and online hybrid meeting session.
 3 Mr. David Aguayo (San Luis Obispo Co., CA), Chair of the PDC reviewed this item due to the current vacancy of
 4 the Safety Subcommittee Chair. The Committee appreciates the ongoing efforts of the regional safety liaisons for
 5 their continued contributions to safety articles. The SWMA Regional Safety Liaison position remains vacant.

6 The Committee received no comments during the open hearing on this item.

7 **Regional Association Comments:**

8 WWMA 2021 Annual Meeting: During the 2021 WWMA Annual Meeting the following comments were received:
 9 David Aguayo, San Luis Obispo County, CA stressed the importance of safety and safety training and urged
 10 continuation of development of safety standards as new technologies such as electrification are implemented
 11 throughout the region and the country. Mr. Ivan Hankins, NCWM Chair, commented that Mr. Johnny Bell, MO has
 12 been appointed as the NCWM Safety Subcommittee Chair and stressed the importance of safety in the workplace.
 13

14 The Committee supports the continuation of the Safety Subcommittee and looks forward to future work with the new
 15 chairperson Mr. Bell.

16 SWMA 2021 Annual Meeting: Chairman, Paul Floyd (LA), requested a volunteer for the safety subcommittee from
 17 SWMA. Mr. Robert Huff (DE) has volunteered to take on that role.

18 NEWMA 2021 Interim Meeting: The committee chair expressed gratitude to the regional safety liaison Mike Sikula
 19 for his contributions to NCWM. The committee heard comments from Mr. Jimmy Cassidy (MA) encouraging the
 20 safety subcommittee to address safety concerns in the area of Cannabis. He stated questions and gave feedback
 21 including if respirators should be used by inspectors and what the risk of contamination may be with cross
 22 contamination especially as it relates to inspectors who may hold a Commercial Drivers Licenses. He stressed the
 23 importance of ensuring that inspectors can do this work in a safe manner.

24 CWMA 2021 Interim Meeting: Committee Chair, Ms. Elizabeth Lambert (MO), provided comment that Mr. John
 25 Bell (MO) has been appointed the position of Safety Subcommittee Chair. Mr. John Bell (MO) commented that
 26 members have the ability to refer to safety page on the NCWM website. He mentioned job site analysis forms are
 27 available from either himself or Don Onwiler (NCWM). Mr. Bell noted Missouri’s Office of Administration is
 28 developing safety training for their state employees and is asking for material that may be beneficial to share. He also
 29 indicated that there is still a vacancy for the SWMA safety liaison position.

NEWMA Report: PMT-1
Regional recommendation to NCWM on item status:
<input type="checkbox"/> Recommend as a Voting Item on the NCWM agenda <input checked="" type="checkbox"/> Recommend as an Information Item on the NCWM agenda <input type="checkbox"/> Recommend as an Assigned Item on the NCWM agenda <i>(To be developed by an NCWM Task Group or Subcommittee)</i> <input type="checkbox"/> Recommend as a Developing Item on the NCWM agenda <i>(To be developed by source of the proposal)</i> <input type="checkbox"/> Recommend Withdrawal of the Item from the NCWM agenda <i>(In the case of new proposals, do not forward this item to NCWM)</i> <input type="checkbox"/> No recommendation from the region to NCWM <i>(If this is a new proposal, it will not be forwarded to the national committee by this region)</i>
Comments and justification for the regional recommendation to NCWM: <i>(This will appear in NCWM reports)</i>
During the 2022 NEWMA Interim Meeting the recent vacancy of the NEWMA Regional Safety Liaison for NCWM was discussed. The committee is seeking volunteers within the organization to fill the position. Jason Flint (New Jersey) provided an update of the NCWM Safety Subcommittee. It was indicated that groups activities have stalled.

There is optimism that the group will reconvene soon to continue its work.

1

2 **PMT-2 I Skimmer Education Task Group**

3 This is a new agenda item added to the report by the PDC after the Publication 15 printing deadline.

4 The Skimmer Education Task Group (SETG) held its first meeting during the 2021 Annual Meeting. The SETG is
5 made up of industry members, regulatory officials, and interested parties for the purpose of continuing work identified
6 by the S&T Committee's Credit Card Skimmer Task Group. Under the guidance of the Professional Development
7 Committee (PDC), the task group will develop education and outreach strategies and gather or produce materials to
8 educate regulatory officials, fuel retailers, industry members and consumers on payment card information theft via
9 skimming devices. The SETG will provide information and organize education sessions to share recommendations
10 for safety procedures and technologies to better protect consumer payment information and reduce the risk of skimmer
11 installation at fuel dispensers. The SETG will continue in force until the task group Chair and the PDC Chair agree
12 the work has been completed. The task group may also be disbanded by vote of the NCWM Board of Directors. The
13 task group will meet via electronic media, teleconferences, face-to-face meetings, or other means available.

14 Co-Chair, Ms. Paige Anderson (NACS) provided a report of their meeting held on January 10, 2021 during the open
15 hearing. Following is a summary of her remarks.

16 The SETG expressed their appreciation for the leadership and assistance of Mr. Hal Prince (FL), the NCWM board
17 and staff, Mr. David Aguayo (San Luis Obispo Co., CA) and the PDC in helping to create the Task Group. Many of
18 the Task Group members worked on the policy item before the Specifications and Tolerances (S&T) Committee to
19 establish user requirements on fuel dispensers to prevent skimming, and during that time recognized the importance
20 of education and training.

21 The SETG's mission to educate the membership and bring together all stakeholders in sharing information on
22 skimming. The SETG recognizes that technology changes include the devices used to steal debit and credit card
23 information, the technology to prevent these thefts, and the criminals become more organized and sophisticated.
24 NCWM provides a powerful platform to bring together all stakeholders – state officials, law enforcement,
25 manufacturers, service companies, retailers, security providers and consumers.

26 In organizing the SETG, it was decided that having co-chairs representing both regulatory officials and the private
27 sector demonstrates partnership in combatting skimming and the criminal organizations.

28 The SETG held their first meeting on Sunday, January 10th, 2021 via web conference. The number of attendees who
29 attended the meeting was remarkable. It clearly demonstrated that there is a significant need for knowledge on this
30 issue. The SETG discussed and finalized their 2021 goals. The two goals are to:

- 31 1. Establish a library of resources for the public on the NCWM website. The resources will consist of videos,
32 articles, reports, checklists, contact information, best practices, and other information. The SETG recognized
33 that there may be some sensitive or proprietary data that should not be put on the public-facing website but
34 may be shared with the membership or a targeted group of the membership. Alternative distribution methods
35 would be determined and used in these cases. Communicating the availability and location of these resources
36 to the membership and beyond is an important element of the strategy and project.
- 37 2. Host presentations and briefings from subject matter experts at future NCWM meetings. The SETG is
38 planning to provide such a briefing at the Annual meeting in July 2021. The SETG is looking at 3 key
39 constituencies to provide presentations:
 - 40 o Law enforcement - overview of the landscape of activity on skimming (e.g., U.S. Secret Service)
 - 41 o Private sector security experts - to share what they are seeing and describe the types of technology
42 being used by the criminals and methods used to combat skimming

- 1 o Retail/industry - updates on the transition to EMV card readers, etc.
- 2 The SETG is also working to identify other key stakeholders to either present or to join the SETG. These key
- 3 stakeholders included financial institutions such as banks, credit card providers, and credit unions.
- 4 The SETG welcomes volunteers and encourages participation from all members. If you or your staff are interested,
- 5 contact Ms. Paige Anderson (NACS), Mr. John McGuire (NJ), members of the PDC, or the NCWM staff.

Skimmer Education Task Group Members		
Co-Chair	Paige Anderson	NACS
Co-Chair	John McGuire	New Jersey
Public Sector	Bobby Fletcher	Louisiana
Public Sector	John Larkin	California
Public Sector	Mike Harrington	Iowa
Public Sector	Vince Wolpert	Arizona
Public Sector	Scott Borse	PEI
Public Sector	Owen Dewitt	FlintLoc Technologies, LLC
Public Sector	Brent Price	Gilbarco, Inc.
Public Sector	Mike Roach	Invenco Payment Systems
Public Sector	Scott Schober	Berkley Varitronics Systems

6 **NCWM Meeting Comments:**

7 NCWM 2022 Interim Meeting: The 2022 Interim Meeting was held in an in-person and online hybrid meeting format.
 8 Co-Chair of the SETG, Mr. John McGuire (NJ) reported the SETG continues to educate, promote awareness and share
 9 information regarding payment card skimming and theft. To accomplish this, the Skimming Education Task Group
 10 has focused on inviting subject matter experts to provide informative presentations and discussions on payment card
 11 security, creating a library of resources to help reduce the threat of payment card skimming and other forms of payment
 12 card theft and creating a template or standard form to capturing key information on skimming incidents. The SETG
 13 has identified a potential speaker specializing in security for either the annual meeting in July 2022 or the interim
 14 meeting next January.

15 No comments were heard during the open hearing.

17 NCWM 2021 Interim Meeting: Meeting was held virtually and immediately following the conclusion of the NCWM
 18 2020 virtual meeting. Ms. Kristin Macey (CA) indicated it has been invaluable to share lessons learned and techniques
 19 on detecting skimmers. Sharing experiences with law enforcement agencies, including local and state law
 20 enforcement, FBI, and Secret Service is helpful. Ms. Macey recommends the Task Group continue these
 21 conversations. Ms. Cheryl Ayer (NH) shared that they worked with the Secret Service in November 2020 to inspect
 22 dispensers in several cities. Ms. Ayer stated that New Hampshire fully supports the Skimmer Education Task Group.

23 NCWM 2021 Annual Meeting: The 2021 Annual Meeting was held in an in person and online hybrid meeting session.
 24 Co-Chair of SETG, Mr. John McGuire (NJ) provided an update to the committee during open hearings. Mr. McGuire
 25 provided information on SETG’s recent meeting and their future efforts. On July 18, 2021, SETG met in Rochester,
 26 NY during the NCMW 106th Annual meeting. The following is a summary of his remarks:

- 27 • SETG met on two separate occasions searching for a pathway to bring forward education and outreach
 28 opportunities on skimmer issues from the weights and measures and law enforcement communities. With
 29 the new User Requirement, U.R. 4.2 Security for Retail Motor-Fuel Devices (RMFD), the task group is
 30 seeking to create a section under the resource tab on NCWM’s website. This would serve as a central
 31 repository dedicated to the dissemination of information for skimmer education and outreach. This would
 32 provide a means to make available resources such as educational videos, a nationwide alert system, useful
 33 forms and documents, and related trainings.
- 34 • Videos can be linked to online sources such as YouTube and other sites that share and provide information
 35 on skimmers related to RMFDs. Videos and other related content can be exchanged with associate
 36 members to educate and potentially provide innovative equipment used in the detection of skimmers.

- 1 • A nationwide alert system to all state directors for immediate notification when a skimmer is detected. The
2 SETG is working towards providing a link for immediate uploading of a detected skimmer to this system.
3 State directors and other authorized users would have the ability to upload information on skimmers,
4 including location of detection, make and model of the RMFD and related skimmer information such as
5 type (E.g., inlay, chip, or thumb drive) and photographs for visual content and clarity. The alert system
6 would be valuable to all jurisdictions in the education and deterrence of skimmers in RMFDs.
- 7 • A checklist that would assist in gathering pertinent information to be documented when a skimmer is
8 detected at a RMFD. The SETG is currently culminating information gathered by multiple jurisdictions to
9 provide a comprehensive checklist. Once finalized, the task group will submit to the PDC for further action.
- 10 • The SETG will be seeking material and presenters through industry partners, including law enforcement
11 officials to provide presentations on skimmers during future NCWM meetings. The focus of these
12 presentations will be to provide current updates, new methods of implementation, technology, and provide
13 resources to membership.
- 14 • The SETG will continue to move forward with these ideas to meet their scope and purpose. Updates on the
15 development of these items will be given by the SETG to the PDC.

16 WWMA 2021 Annual Meeting: During the 2021 WWMA Annual Meeting the following comments were received:
17 David Aguayo, San Luis Obispo County, CA commented this task group has determined next steps to consolidate best
18 practices in oversight and sharing of information. Because of the variation in the ongoing development of this item in
19 different parts of the country, it is important to share developing information across regions.

20 The Committee supports the continuation of this task group and looks forward to learning more from its future work
21 on its two goals established during the 2021 NCWM Annual meeting; 1) the establishment of a resource library on
22 skimmers, and 2) training and informational sessions from subject matter experts during subsequent meetings
23 throughout the year

24 SWMA 2021 Annual Meeting: Dr. Bobby Fletcher (LA) gave a report from the skimmer education task group stating
25 the subcommittee was compiling information on credit card skimmers.

26 NEWMA 2021 Interim Meeting: Mr. John McGuire (NJ) co-chair of the Skimmer Education Task Group (SETG)
27 gave an update on the groups progress. The SETG met for the second time at the Annual NCWM in Rochester, NY
28 (July 18-21, 2021), the group is in its starting phase. The SETG has outlined goals and will be seeking to use the PDC
29 as an ongoing platform for the group. The SETG will be proposing to use the Resource Tab, located on the NCWM
30 website, as a repository for Skimmer information. Items that can be posted on the Resource Tab include videos linked
31 to YouTube that can be used to educate regulators to assist in identifying skimmers and the equipment used in detecting
32 them. Additional goals of the SETG include developing a reporting process for jurisdictions to disseminate the
33 information using a nationwide Alert Tab when detecting a skimmer. The Resource Tab can be part of this process
34 to assist in providing related information including pictures and descriptions such as if a chip or thumb drive may have
35 been used. The SETG currently plans on having these goals formalized in time for the interim NCWM meeting in
36 January 2022 where they plan on utilizing the PDC platform at open hearings to educate and update attendees. Mr.
37 Jimmy Cassidy (MA) commented on the importance of the work of the SETG and noted significant interest for the
38 Skimmer Alert System proposal. He encouraged support for the Skimmer Alert System and for related funding that
39 might be needed for this initiative.

40 CWMA 2021 Interim Meeting: Mr. Mike Harrington (IA), member of the SETG, provided an update indicating that
41 during the NCWM 2021 Annual Meeting John McGuire (NJ), co-chair of task force group, mentioned the possibility
42 of having a presentation on skimmers at the NCWM Interim Meeting. Mr. Harrington commented that Shazam, a
43 network of ATMs has provided presentations and trainings in Iowa and is very knowledgeable in this area and they
44 may be available to present information at the next NCWM meeting. Charlie Stutesman (KS) suggested members
45 could reach out to Hal Prince (FL) for training opportunities as Florida has become a great resource for skimmer
46 education.

47 Additional letters, presentation and data may have been submitted for consideration with this item. Please refer to
48 <https://www.ncwm.com/publication-15> to review these documents.

NEWMA Report: PMT-2

Regional recommendation to NCWM on item status:

- Recommend as a Voting Item on the NCWM agenda
- Recommend as an Information Item on the NCWM agenda
- Recommend as an Assigned Item on the NCWM agenda
(To be developed by an NCWM Task Group or Subcommittee)
- Recommend as a Developing Item on the NCWM agenda
(To be developed by source of the proposal)
- Recommend Withdrawal of the Item from the NCWM agenda
(In the case of new proposals, do not forward this item to NCWM)
- No recommendation from the region to NCWM
(If this is a new proposal, it will not be forwarded to the national committee by this region)

Comments and justification for the regional recommendation to NCWM: *(This will appear in NCWM reports)*

During the NEWMA 2022 Annual Meeting the co-chair of the Skimmer Education Task Group (SETG) John McGuire (New Jersey) provided an update regarding the work of the group. A preview of a universal form developed with the help of Ken Ramsburg (Maryland) for the SETG. This form is intended for inspectors to use for reporting when a skimmer is found. The hope is that uniform reporting can be shared throughout the weights and measures community across the country. A goal of the SETG is to provide a repository of skimmer activity reporting to be accessed by all NCWM members. A discussion was had regarding emerging skimmer technologies as well as the increased presence of altered pulsars being found in the field.

-
- 1 Mr. Ethan Bogren, Westchester County, New York | Committee Chair
 - 2 Mr. Angel Nazario, City of Boston, Massachusetts | Member
 - 3 Mr. Marc Paquette, Vermont | Member
 - 4 Mr. Bill Callaway, Crompco | AMC Representative
 - 5 **Professional Development Committee**

Appendix A

Summary of NIST OWM Training Conducted in 2021

(PDC Agenda Item EDU-2)

Summary of NIST OWM Training Conducted in 2021			
Area/Course Name	Start Date	Location	No. of Students
Laboratory Metrology			
Fundamentals of Metrology & LAP Problems Preparation	1/12/21 & 5/11/21	Web-based	6
Regional Measurement Assurance Programs			
MidMAP	10/24/21	Web-based	25
NEMAP	08/02/21	Web-based	21
SEMAP	03/22/21	Web-based	32
SWAP	08/30/21	Web-based	25
WRAP	05/03/21	Web-based	22
Webinars			
Basic Uncertainty Concepts	05/20/21	Web-based	8
Contract Review	03/11/21	Web-based	8
Contract Review	07/29/21	Web-based	5
Document Control and Record Keeping	03/04/21	Web-based	10
Document Control and Record Keeping	07/22/21	Web-based	6
Info Hour – Assessing Field Standards for Calibration & Use (3 sessions: 6/22/21; 9/21/21; & 11/9/21)	06/22/21	Web-based	172
Software Verification & Validation	06/10/21	Web-based	9
State Laboratory Annual Submission Process	07/01/21	Web-based	58
Laws and Metric Program			
Packaging & Price Verification			
Handbook 130 – Examination Procedure for Price Verification <i>5 Sessions:</i> 1/21/2021; 2/16/2021; 4/14/2021; 7/14/2021; 10/1/2021	5 Sessions Jan to Oct 2021	Web-based	Total 178
Handbook 130 – Overview of the Uniform Packaging and Labeling Regulation <i>4 Sessions:</i> 2/17/2021; 4/15/2021; 7/15/2021; 10/7/2021	4 Sessions Feb to Oct 2021	Web-based	Total 156
Handbook 133 – How to Test Animal Bedding <i>4 Sessions:</i> 2/24/2021; 4/28/2021; 7/13/2021; 10/20/2021	4 Sessions Feb to Oct 2021	Web-based	Total 71
Handbook 133 – Overview of Handbook 133 <i>5 Sessions:</i> 2/18/2021; 4/19/2021; 7/27/2021; 8/26/2021; 10/14/2021	5 Sessions Feb to Oct 2021	Web-based	195
Weights and Measures Inspections – Evidence, Search and Seizure, and Due Process <i>5 Sessions:</i> 1/26/2021; 2/23/2021; 4/22/2021; 7/1/2021; 10/26/2021	5 Sessions Jan to Oct 2021	Web-based	Total 183
LPG (Propane) -Verifying the Net Contents of 20 lb Cylinders (Part 1) - NEW <i>4 Sessions:</i> 6/30/2021; 7/26/2021; 8/24/2021; 10/21/2021	4 Sessions Jun to Oct 2021	Web-based	Total 338
Metric Education			
Info Session – Metric Education Resources	05/22/21	Web-based	5

NEWMA PDC 2022 Annual Meeting Agenda
 Appendix A – Summary of NIST OWM Training Conducted in 2019

	09/11/21	Web-based	4
	09/29/21	Web-based	6
Info Session – Metric Estimation	08/14/21	Web-based	6
	09/15/21	Web-based	3
Measurement System Basics – SI and US Customary Units for Regulatory Officials	08/26/21	Webinar	23
Legal Metrology Devices			
No training seminars were offered in 2021.	--	--	--

Appendix B

NIST OWM Training: Future Plans – Updated Information (PDC Agenda Item EDU-2)

No current commitments to in-person training for 2021

- All in person field inspection classes postponed until further notice

Training in FY 2022

- Travel restrictions may lift later this summer
- Continuing to assess as the situation unfolds
 - Local pandemic restrictions
 - Travel restrictions for training staff and students
- Unclear how pandemic related restrictions will affect NIST OWM’s future in-person training for all programs
 - Impact of social distancing requirements on classroom size, configuration, and ability to present to groups of students
- Lab Metrology Program closely watching NIST OWM policies regarding hosting events in-person

Training Going Forward

- Will continue to offer virtual training
- Plan to expand available virtual training topics
- Experimenting with available technology and tools to best incorporate elements of “hands on” in-field inspection training

Virtual Training Space

- Significant progress on outfitting a virtual training space at NIST for OWM’s use in delivering virtual training
 - Small group within OWM has been working with their NIST staff to plan this effort
 - Space has been allocated and equipment purchases are in progress
 - Significant support from the Physical Measurement Laboratory (OWM’s larger operating unit)
 - Looking forward to beginning work on this space

OWM Trainers

- Participating in a variety of training courses as part of their professional development
 - Virtual training design, development, and delivery

Considering Development of Hybrid Courses

- For uses during and after pandemic
- Virtual sessions coupled with hands-on sessions using virtual technology and/or local on-site trainers to help facilitate

See OWM Calendar of Events for Upcoming Training

- www.nist.gov/newsevents/upcomingevents/org/6436
- Note: A series of three new webinars planned on the topic of LPG Cylinder Refilling
 - LPG (Propane) – Verifying the Net Contents of 20 lb Cylinders (Part 1)” already in progress with several upcoming sessions

