Field Activities Expert Committee (FAC)

Meeting Summary
April 1, 2019

1. Roll call:

   Chair, Scott Haas, called the FAC meeting to order on April 1, 2019 at 11am Eastern by teleconference and Webex. Attendance is recorded in Attachment A – there were 7 members present. Associate Members: Justin Brown and Bruce Weckworth.

   Meeting minutes are sent to the committee by email. If no comments are received within one week of the email notification, they are considered approved and are posted on the TNI website.

2. Standard Update

   The committee continued its review of the combined Standard to look for duplicate language starting at Section 7.2.1.7.

   A copy of track changes made to the combined document during the meeting can be found in Attachment E. The Committee stopped at Section 7.5 (Technical Records).

3. New Business

   None.

4. Action Items

   The table in Attachment C summarizes all action items. See notes on table.

5. Next Meeting

   The next meeting will be on Monday, 4-15-19 by teleconference at 11am Eastern. This is an extra meeting in April.

   The meeting was adjourned at 12:20pm Eastern. (Motion – Doug Second – Kira Unanimously approved.)

Attachment A

Participants
TNI Field Activities Committee

Members	Term Expires	Affiliation	Balance	Contact Information
Scott Haas (Chair) **Present**	2022	Environmental Testing, Inc.	FSMO	shaas@etilab.com
Shannon Swantek (Vice-Chair) **Present**	2020	ESI	Other	sswantek@envstd.com
Kevin Holbrooks **Absent**	2020	Jacksonville Electric Authority	Other	holbke@jea.com
Doug Berg **Present**	2020*	PJLA	AB	dberg@PJLabs.COM
David Fricker **Absent**	2022*	A2LA	AB	dfricker@a2la.org
Kieth Klemm **Absent**	2021*	ANAB	AB	kklemm@anab.org
Marlene Moore **Absent**	2021*	Advanced Systems, Inc.	Other	mmoore@advancedsys.com
Andora Nguyen **Present**	2022	Eurofins Eaton Analytical	Other	AndoraNguyen@eurofinsUS.com
Bill Ray **Absent**	2021*	William Ray Consulting, LLC	Other	Bill_Ray@williamrayllc.com
Russell Schindler **Absent**	2021*	SampleServe	FSMO	schindler@sampleserve.com
Kira Stokes **Present**	2021*	HRSD	FSMO	Kstokes@HRSD.com
Tyler Sullens **Present**	2021*	Alabama Power Company	FSMO	tasullen@southernco.com
Elizabeth West **Present**	2021*	Louisiana DEQ	AB	elizabeth.west@la.gov
Ilona Taunton (Program Administrator) **Present**		The NELAC Institute		Ilona.taunton@nelac-institute.org

Attachment B

NEFAP ADVOCACY SCHEDULE

Organization	Event	Type of Presentation	Event Dates	Presenter
Past Events				
Midwest Groundwater Association	2009 Annual Midwest Groundwater Conference	Poster	October 15, 2009	Justin Brown
National Groundwater Association	2010 National Groundwater Summit	Speaking	April 13, 2010	Justin Brown
US Department of Defense	2010 EDQW	Speaking	April 15, 2010	Justin Brown
AEHS Foundation, Inc	26th Annual International Conference on Soils, Sediments, Water, and Energy	Poster	October 18, 2010	Declined Invitation (nobody to present)
US Environmental Protection Agency	20th Annual Quality Assurance Conference	Speaking	October 20, 2010	Jo Ann Boyd
Pacific Northwest Clean Water Association	2010 Annual Conference	Speaking	October 26, 2010	Keith Champman
NWEC	2010 Northwest Environmental Conference	Speaking	December 6, 2010	Scott Hoatson
Midwest Water Analysts Association	2011 Winter Expo	Speaking	January 28, 2011	Justin Brown
Battelle	Battelle for the International Conference on Remediation of Contaminated Sediments	Poster	February 7, 2011	Declined Invitation (nobody to present)
SSAAP	Stationary Source Sampling and Analysis for Air Pollutants XXXV Conference	Speaking	March 20, 2011	Scott Evans
American Water Works Association	2011 Watercon	Speaking	March 20, 2011	Justin Brown
US Department of Defense	2011 EDQW	Speaking	March 28, 2011	Justin Brown
ASQ	2011 ASQ Energy and Environment Conference	Speaking		Randy Querry
US Environmental Protection Agency	2011 Annual EPA Quality Assurance Conference	Speaking	October 18, 2011	Jo Ann Boyd
Midwest Environmental Laboratory Stakeholders	2011 MELSS Annual Meeting	Speaking	December 2, 2011	Justin Brown

Organization	Event	Type of Presentation	Event Dates	Presenter
	2012 Environmental Regulatory and Compliance Conference	Speaking		Calista Daigle
US Environmental Protection Agency	2012 On-site testing conference	Speaking	January 23, 2012	Lauren Smith
US Department of Defense	2012 EDQW	Speaking	March 2012	Justin Brown/ Marlene Moore
Stack Testing Accreditation Council	2012 Source Evaluation Society Annual Conference	Speaking	March 7, 2012	Maggie Cangro
Texas Commission for Environmental Quality	2012 TCEQ Environmental Trade Fair and Conference	Speaking	May 1, 2012	Mike Shepard
US Environmental Protection Agency	2012 Annual EPA Quality Assurance Conference	Speaking	October 15, 2012	Jo Ann Boyd
PIANC USA/ COPRI ASCE	2012 Dredging PIANC/ COPRI ASCE	Speaking	October 22, 2012	Declined Invitation (nobody to present)
Environmental Protection Agency / Dept. of Homeland Security	2013 On-site Analysis Conference	Speaking	January 23, 2013	Lauren Smith
Louisiana Water Environment Association	21st Annual Technical Exhibition and Conference Louisiana Water Environment Association Conference	Speaking	April 18, 2013	Tracy Szerszen
Oregon Environmental Laboratory Association	OELA/ORELAP Annual Environmental Lab Workshop	Speaking	May 16, 2013	Kim Watson
Florida Society of Environmental Analysts	2013 FSEA Annual Spring Meeting and Technical Session	Speaking/ Technical Seminar	May 22, 2013	John Moorman
State Assessor Forum	Conference Call	Speaking / Q&A	July 22, 2013	Justin Brown Marlene Moore
US Army Corp of Engineers	Regional Workshop	Speaking	September 11th, 2013	John Moorman
US Environmental Protection Agency	2013 Annual EPA Quality Assurance Conference Conference	Speaking	October 14, 2013	Jo Ann Boyd
Florida Society of Environmental Analysts	Field Quality Systems Workshop	Speaking	October 23rd, 2013	John Moorman
Illinois Association of Environmental Testing Labs	Midwest Environmental Stakeholder Summit	Speaking	December 6th, 2013	Jerry Parr
TWUA	??	Speaking	March 10th, 2015	JoAnn Boyd

Organization	Event	Type of Presentation	Event Dates	Presenter
US Environmental Protection Agency	2014 Annual EPA Quality Assurance Conference	Speaking	October 24, 2014	Jo Ann Boyd
TCEQ	TCQ Trade Fair	Speaking	May 5, 2015	Marlene Moore
NEMC/TNI	NEMC Conference – Full Day Training: Sample Collection Design and Accreditation – Is Your Sample Data Defensibile?	Speaking	July, 17, 2015	Marlene Moore
FSEA	FSEA Meeting Workshop	Speaking	October 28, 2015	John Moorman (Additional: Mitzi Miller, Katie Strothman, Kelly feist, Mike Shepherd, Chris Gunning, Doug Berg)
FSEA	FSEA Meeting Workshop – NEFAP Forum	Speaking	May 25, 2016	John Moorman (Additional: Calista Daigle, Katie Strothman, Mike Shepherd, Chris Gunning, Doug Berg)
TNI	NEFAP Forum	Webinar	June 13, 2016	John Moorman
NEMC/TNI	NEFAP Workshop	Speaking	August 10, 2016	John Moorman
Dallas – Pretreatment Coordinators	Dinner Meeting	Speaking	March 6, 2017	Jerry Parr
Upcoming Events				

Attachment C

Action Items – FAC

	Action Item	Who	Expected Completion	Actual Completion
47	Update Presentation Summary and distribute before meetings. (Prepare table of speaking engagements. This will be added to minutes and website. Follow-up with Scott Hoatson, Jan and other committee members to find out about other speaking engagements to add to the summary table being prepared.)	JoAnn Justin	Each Meeting	Ongoing 1-15-13: Ilona meeting with William to set this up to add to website. 4/20/13: Ilona requested status update from William.
132	Plan Tools Subcommittee Meeting after the Orange County meeting.	Ilona/Kevin	8/31/16	In Progress
142	Send Scott Scope Subcommittee Charter and DRAFT update to Charter.	Kevin	7/17/17	
144	Review last Standard Update information in upcoming committee meeting.	All	TBD	
152	Compare 2014 FSMO Standard to new ISO/IEC 17025:2017. Move language into new format – first DRAFT.	Shannon	5/21/18	Still in progress.
153	Send Shannon a copy of the current LAB Standard. Shannon will forward to the Committee.	Marlene Shannon	7-9-18	
154	Comment on the DRAFT AB Standard with the 2014 Standard language transferred into the new ISO/IEC 17011:2017 document. Did things get moved to the right sections? Was everything moved?	All	7-16-18	
155	Compare the DRAFT Field AB Standard to work being done at LAB. Present to FAC.	Marlene	Before next meeting after receiving document based on Action item #154.	

	Action Item	Who	Expected Completion	Actual Completion
156	Read NEFAP: 2014 and ISO/IEC 17025:2017	All	Added 9/18/18: 10/1/18	
157	From NOLA Meeting: Discern added value to be included ◦ Make a list ◦ Prioritize Items ◦ Start with Section 4 ISO/IEC 17025:2017 (Marlene) ◦ Evaluate Section 4 at next FAC meeting and assign new sections	All	TBD	
158	From NOLA Meeting: Seek Stakeholder Input for the new outline ◦ Interview data user/engineering firms ◦ AB survey current FSMO ▪ What is value added?	All	TBD	
159	From NOLA Meeting: Public Meeting/Webinar for Input	All	TBD	
160	From NOLA Meeting: Read ISO 17011:2017 • Plan Update w/ABs	All	Added 9/18/18: 10/1/18	
162	Color code DRAFT AB Standard.	Scott	TBD	
167				

Attachment D

Backburner / Reminders – FAC

	Item	Meeting Reference	Comments
2	Review charter in October 2019.	2/2/11	Standing task. 12/3/18: Will be done in Milwaukee.
3	Analyze container issue and present initial plan to committee. Started in 2014 and summarized 4/24/15 and at the Chicago meeting in July 2015. Subcommittee: Justin, Terrence, Kevin, Scott	2014	There was not enough interest to form a subcommittee with the proper representation, so this has been tabled until there is more interest.
4			

Attachment E:

7.2.1.7

7.2.2 Validation of methods

5.4.4 Non-Standard Methods (ISO/IEC 17025:2005(E), Clause 5.4.4)

NOTE: For new test and/or calibration methods, procedures should be developed prior to the tests and/or calibrations being performed and should contain at least the following information:

a) appropriate identification;

b) scope;

c) description of the type of item to be tested or calibrated;

d) parameters or quantities and ranges to be determined;

e) apparatus and equipment, including technical performance requirements;

f) reference standards and reference materials required;

g) environmental conditions required and any stabilization period needed;

h) description of the procedure, including: affixing of identification marks, handling, transporting, storing and preparation of items; checks to be made before the work is started; checks that the equipment is working properly and, where required, calibration and adjustment of the equipment before each use; the method of recording the observations and results; any safety measures to be observed;

i) criteria and/or requirements for approval/rejection;

j) data to be recorded and method of analysis and presentation;

k) the uncertainty or the procedure for estimating uncertainty.

7.2.2.1

7.2.2.2

Deleted: 5.4.1→*The laboratory shall use appropriate methods and procedures for all tests and/or ←calibrations within its scope. These include sampling, handling, transport, storage and ←preparation of items to be tested and/or calibrated, and, where appropriate, an ←estimation of the measurement uncertainty as well as statistical techniques for ←analysis of test and/or calibration data.*

The laboratory shall have instructions on the use and operation of all relevant equipment, and on the handling and preparation of items for testing and/or calibration, or both, where the absence of such instructions could jeopardize the results of tests and/or calibrations. All instructions, standards, manuals and reference data relevant to the work of the laboratory shall be kept up to date and shall be made readily available to personnel (see 4.3). Deviation from test and calibration methods shall occur only if the deviation has been documented, technically justified, authorized, and accepted by the customer.

Deleted: 5.4.2.1→The FSMO shall establish and maintain procedures for the following activities: selection and documentation of field sampling and measurement points, collection, preservation, and transportation of samples; and operation of measurement instruments under variable conditions in the field environment. Records shall be maintained for these activities. Program specific regulations, , project specific procedures, client-specified data quality objectives, reference methods or test method requirements shall be followed if more stringent than this Standard.

Deleted: *When it is necessary to use methods not covered by standard methods, these shall be subject to agreement with the customer and shall include a clear specification of the customer's requirements and the purpose of the test and/or calibration. The method developed shall have been validated appropriately before use.*

Commented [SH1]: These seem to be covered in the new ISO language; however, need to double check.

Commented [SH2]: See 7.2.2.4

Deleted: 5.4.5.2→*The laboratory shall validate non-standard methods, laboratory-designed/developed methods, ←standard methods used outside their intended scope, and amplifications and modifications of ←standard methods to confirm that the methods are fit for the intended use. The validation shall be ←as extensive as is necessary to meet the needs of the given application or field of application. The ←laboratory shall record the results obtained, the procedure used for the validation, and a ←statement as to whether the method is fit for the intended use.*

7.2.2.3

7.2.2.4 *The laboratory shall retain the following records of validation:*

a) ;

5.4.5.2 NOTE 1: Validation may include procedures for sampling, handling and transportation.

-

b)

NOTE 3: Validation is always a balance between costs, risks and technical possibilities. There are many cases in which the range and uncertainty of the values (e.g. accuracy, detection limit, selectivity, linearity, repeatability, reproducibility, robustness and cross-sensitivity) can only be given in a simplified way due to lack of information.

c)

d)

e)

7.3 Sampling

7.3.1

5.1.3 Field samples and measurements shall be representative of the environment, setting or process sampled or measured. The FSMO shall select and document sampling or measurement location, date and time, and conditions that are representative.

5.7 Sampling *(ISO/IEC 17025:2005(E) Clause 5.7)*

5.7.1 *ISO/IEC 17025:2005(E), Clause 5.7.1*

NOTE 1: Sampling is a defined procedure whereby a part of a substance, material or product is taken to provide for testing or calibration of a representative sample of the whole.

Deleted: 5.4.5.2 *NOTE 3: When some changes are made in the validated non-standard methods, the influence of such changes should be documented and, if appropriate, a new validation should be carried out.…*

Deleted: *5.4.5.3 The range and accuracy of the values obtainable from validated methods (e.g. the uncertainty of the results, detection limit, selectivity of the method, linearity, limit of repeatability and/or reproducibility, robustness against external influences and/or cross- sensitivity against interference from the matrix of the sample/test object), as assessed for the intended use, shall be relevant to the customers' needs.¶*

Deleted: 5.4.5.2 *The laboratory shall validate non-standard methods, laboratory-designed/developed methods, standard methods used outside their intended scope, and amplifications and modifications of standard methods to confirm that the methods are fit for the intended use. The validation shall be as extensive as is necessary to meet the needs of the given application or field of application. The laboratory shall record the results obtained, the procedure used for the validation, and a statement as to whether the method is fit for the intended use.*

Commented [SH3]: Consider keeping

Deleted: *NOTE 2: The techniques used for the determination of the performance of a method should be one of, or a combination of, the following:¶*
¶
calibration using reference standards or reference materials;¶ … [1]

Deleted: *5.4.5.3 NOTE 1: Validation includes specification of the requirements, determination of the characteristics of the methods, a check that the* … [2]

Commented [SH4]: Review, this idea has been observed to be used as an "excuse" for not completing validation requirements. See note at 7.2.2.3

Deleted: 5.4.5.3 *NOTE 1: Validation includes specification of the requirements, determination of the characteristics of the methods, a check that the* … [3]

Deleted: 5.4.5.2 *The laboratory shall validate non-standard methods, laboratory-designed/developed methods, standard methods used outside their intended scope, and amplifications and modifications* … [4]

Deleted: 5.4.5.2 *The laboratory shall validate non-standard methods, laboratory-designed/developed methods, standard methods used outside their intended scope, and amplifications and modifications* … [5]

Commented [SH5]: Keep for future review. Particularly the "representative of the environment".

Deleted: *The laboratory shall have a sampling plan and procedures for sampling when it carries out sampling of substances, materials or products for subsequent testing or calibration. The sampling plan* … [6]

Sampling may also be required by the appropriate specification for which the substance, material or product is to be tested or calibrated. In certain cases (e.g. forensic analysis), the sample may not be representative but is determined by availability.

NOTE 2: Sampling procedures should describe the selection, sampling plan, withdrawal and preparation of a sample or samples from a substance, material or product to yield the required information.

7.3.2

5.7.1 *NOTE 2: Sampling procedures should describe the selection, sampling plan, withdrawal and preparation of a sample or samples from a substance, material or product to yield the required information.*

5.7.4 The FSMO shall document the sampling subject, location and time sufficiently to allow data users to determine representativeness, as described in Clause 5.1.3.

7.3.3

5.7.2 ISO/IEC 17025:2005(E), Clause 5.7.2

Where the customer requires deviations, additions or exclusions from the documented sampling procedure, these shall be recorded in detail with the appropriate sampling data and shall be included in all documents containing test and/or calibration results, and shall be communicated to the appropriate personnel.

5.7.5 The FSMO shall document the sample type, methods and equipment used to collect a sample or complete a measurement, as described in Clauses 5.4.2.1, 5.5.4.1, and 5.5.6.1.

7.4 Handling of test or calibration items

7.4.1

5.8.4 *ISO/IEC 17025:2005(E), Clause 5.8.4*

Where a test or calibration item or a portion of an item is to be held secure, the laboratory shall have arrangements for storage and security that protect the condition and integrity of the secured items or portions concerned.

Commented [SH6]: Previously inserted.

Commented [SH7]: Keep for review. Sampling section will need to be reviewed extensively.

Commented [SH8]: Review

Commented [SH9]: 7.1.4 also possibility

Commented [SH10]: Review see 7.8.2.2, 7.8.3.2, 7.8.4.2

Commented [SH11]: Review

Deleted: 5.7.3 →*ISO/IEC 17025:2005(E), Clause 5.7.3*¶
The laboratory shall have procedures for recording relevant data and operations relating to sampling that forms part of the testing or calibration that is undertaken. These records shall include the sampling procedure used, the identification of the sampler, environmental conditions (if relevant) and diagrams or other equivalent means to identify the sampling location as necessary and, if appropriate, the statistics the sampling procedures are based upon.¶

Deleted: 5.8 →Handling of Test and Calibration Items *(ISO/IEC 17025:2005(E) Clause 5.8)* ¶
5.8.1 →*ISO/IEC 17025:2005(E), Clause 5.8.1*¶
The laboratory shall have procedures for the transportation, receipt, handling, protection, storage, retention and/or disposal of test and/or calibration items, including all provisions necessary to protect the integrity of the test or calibration item, and to protect the interests of the laboratory and the customer.

Deleted: *The laboratory shall have procedures and appropriate facilities for avoiding deterioration, loss or damage to the test or calibration item during storage, handling and preparation. Handling instructions provided with the item shall be followed. When items have to be stored or conditioned under specified environmental conditions, these conditions shall be maintained, monitored and recorded.*

Commented [SH12]: Notes for 5.8.4 are presented later in the document.

Commented [SH13]: Review related to the term "secure".

7.4.2

7.4.3

5.6.3.4 Transport and storage

NOTE: Additional procedures may be necessary when reference standards and reference materials are used outside the permanent laboratory for tests, calibrations or sampling.

7.4.4 When items need to be stored or conditioned under specified environmental conditions, these conditions shall be maintained, monitored and recorded.

5.8.4 ISO/IEC 17025:2005(E), Clause 5.8.4

NOTE 1: Where test items are to be returned into service after testing, special care is required to ensure that they are not damaged or injured during the handling, testing or storing/waiting processes.

NOTE 3: Reasons for keeping a test or calibration item secure can be for reasons of record, safety or value, or to enable complementary tests and/or calibrations to be performed later.

NOTE 4: For Field Sampling and Measurement Organizations, the requirements for "test and calibration items" apply equally well to "field samples". That is, these requirements apply to both FSMO "field samples" and "test and calibration items".

7.5 Technical records

Deleted: 5.8.2→*ISO/IEC 17025:2005(E), Clause 5.8.2*¶
The laboratory shall have a system for identifying test and/or calibration items. The identification shall be retained throughout the life of the item in the laboratory. The system shall be designed and operated so as to ensure that items cannot be confused physically or when referred to in records or other documents.¶
¶
The system shall, if appropriate, accommodate a sub-division of groups of items and the transfer of items within and from the laboratory.¶

Deleted: *The laboratory shall have procedures for safe handling, transport, storage and use of reference standards and reference materials in order to prevent contamination or deterioration and in order to protect their integrity.*¶

Commented [SH14]: Review, this may be an important clarification to make. Difference between pH, conductivity standards, field probes, and metrology type standards. Consider including something along the lines of "where the sampling occurs". Idea of protecting the integrity at the sampling location needs to be conveyed.

Deleted: 5.8.3→*ISO/IEC 17025:2005(E), Clause 5.8.3*¶
Upon receipt of the test or calibration item, abnormalities or departures from normal or specified conditions, as described in the test or calibration method, shall be recorded. When there is doubt as to the suitability of an item for test or calibration, or when an item does not conform to the description provided, or the test or calibration required is not specified in sufficient detail, the laboratory shall consult the customer for further instructions before proceeding and shall record the discussion.

Deleted: The laboratory shall have procedures and appropriate facilities for avoiding deterioration, loss or damage to the test or calibration item during storage, handling and preparation. Handling instructions provided with the item shall be followed. When items have to be stored or conditioned under specified environmental conditions, these conditions shall be maintained, monitored and recorded. Where a test or calibration item or a portion of an item is to be held secure, the laboratory shall have arrangements for storage and security that protect the condition and integrity of the secured items or portions concerned.¶

Commented [SH15]: Review for "returned to service" concept.

Deleted: *NOTE 2:→A sampling procedure and information on storage and transport of samples, including information on sampling factors influencing the test or calibration result, should be provided to those responsible for taking and transporting the samples.*

Commented [SH17]: Review related to "secure"

Commented [SH18]: Review. See 7.3 and 7.4

Commented [SH19]: Stopping point 4/1/2019

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