Field Activities Expert Committee (FAC)

Meeting Summary
June 20, 2017

1. Roll call:

   Chair, Kevin Holbrooks called the FAC meeting to order on June 20, 2017 at 11am Eastern by teleconference. Attendance is recorded in Attachment A – there were 5 members present. Associate Members: Maggie Cangro, Terrence Romaine, and Rich Smith.

   The last meeting was May 1, 2017.

   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.

   Ilona will send an email to the associate members and see who wants to remain on the committee. Maggie will send an updated Stack Testers list of names.

2. Charter

   The Charter has been completed and has been sent to the CSDP Executive Committee for review.

3. Scope Guidance Subcommittee

   Scott asked for guidance on what the FAC is really looking for with this document. Scott still needs to check-in with Kim.

   The document is supposed to clarify to the ABs on how to develop Scopes. Some of the work the subcommittee has done will be transferred into the Standard update.

   Scott asked how long the document should be. The document defines matrices and then gets into technologies. It is difficult to cover all the technologies. Maggie thinks everyone agreed that this should be a higher-level review, but Kim thought it should be more specific. Kevin will join in during the next meeting to discuss this disagreement.

   Mike noted that ABs will have a problem if the document gets too detailed. Kevin thinks flexibility still needs to be in the document.

Maggie noted that some of what Kim wrote is confusing and it needs to be updated to be consistent with the rest of the document. Scott will talk to Kim for some clarification.

Kevin will email Scott a copy of the subcommittee charter. He will also Draft an update to the Scope to reflect today's discussion.

Scott will send to Ilona what the subcommittee has done to date and it will be added to the minutes. *(Addition: see Attachment E.)*

4. Standard Review

Kevin sent out a spreadsheet this morning that outlines the Standard Review process. It covers items that have been completed and action items moving forward. Kevin asked for comments from the committee on whether there is enough information.

Kevin asked about how comments should be organized. Ilona will check in with Lynn for a copy of the spreadsheet she is using for comments.

A letter needs to be prepared to solicit comments about the Standard from stakeholders. Stakeholders will include EPA, FSMOs, State ABs, NEFAP ABs, and other States (ask the Advocacy committee for the list they have). Kevin would like to move forward on this as soon as a comprehensive mailing list is complete.

The committee will tentatively plan for a public comment meeting via webinar on 9-15-17.

Kevin would like to divide the Standard up between committee members who will be responsible for updating their section and providing updates each month. This will be further explored in one of the upcoming meetings.

5. NEMC

The FAC meeting in Washington, DC is 9-10am on Thursday. Kevin encouraged people to attend, because phone conferencing may not be available. Ilona recommended setting up hotel reservations immediately if someone plans to attend.

Ilona recommend people attend the ISO session on Thursday at the DC meeting. The session is the afternoon after the FAC meeting.

6. New Business

Ilona provided an update on the PTP/NEFAP evaluation workgroup.

7. Action Items

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

8. Next Meeting

The next meeting of the FAC will be July 18, 2017 at 11am Eastern by teleconference.

The meeting was adjourned at noon Eastern.

Attachment A

Participants
TNI Field Activities Committee

Members	Term Expires	Affiliation	Balance	Contact Information	
Kevin Holbrooks (Chair) **Present**	2020	Jacksonville Electric Authority	Other	904-537-6948	holbke@jea.com
Larry Duty (Vice-Chair) **Absent**	2018*	E-Lab Consultants	Other	(832)364-0173	lduty@e-labdc.com
Andora Nguyen **Absent**	2019*	Eurofins Eaton Analytical	Other	(626) 386- 1159	AndoraNguyen@eurofinsUS.com
Bennett Osborne **Present**	2020*	Lab Test	Other	509-575-3999	Vws155@gmail.com
Christina Perez **Absent**	2020*	HRSD	FSMO	757-460-7044	cperez@HRSD.com
Doug Berg **Absent**	2020*	PJLA	AB		berg@pjlabs.com
Harry O'Neill **Absent**	2018*	Beacon Environmental Services, Inc.	FSMO	(410) 838-8780 Ext. 113	Harry.ONeill@Beacon-usa.com
Kyle Flowers **Absent**	2020*	Catalyst Air Management, Inc.	FSMO	334-303-0119	Kyle.flowers@catalystair.com
Michelle Bradac **Absent**	2020*	A2LA	AB	301-644-3227	mbradac@a2la.org
Mike Shepherd **Present**	2018	L-A-B (Shepherd Technical Services)	AB	512-970-6789	mike@sheptechserv.com
Scott Haas **Present**	2019*	Environmental Testing, Inc.	FSMO	405-488-2400	shaas@etilab.com
Shannon Swantek **Present**	2020	ESI	Other	831-295-1887	sswantek@envstd.com
Tom Martins **Absent**	2020	NYCEP	FSMO	(914) 345-4980	martinst@dep.nyc.gov
Troy Burrows **Absent**	2018		AB	(800) 429-8445	tburrows@yahoo.com
Ilona Taunton (Program Administrator) **Present**		The NELAC Institute		(828)712-9242	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
140	Talk to Kim about Scope Guidance documents and make updates.	Scott	TBD	
141	Send current Scope Guidance Document to put in meeting attachments for 6/20/17.	Scott/Ilona	6/30/17	
142	Send Scott Scope Subcommittee Charter and DRAFT update to Charter.	Kevin	7/17/17	

Attachment D

Backburner / Reminders – FAC

	Item	Meeting Reference	Comments
2	Update charter in October 2016.	2/2/11	Delayed until new format is determined.
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 -

Organizations (See TNI FSMO Standard for Definition)

A. Multiple Facility Organization

B. Single Facility Organization

General Categories - Matrix

(*Add definition of Matrix – Simplify with some examples and caveat that they are just examples.*)

I. Air

Air sampling may be divided into three (3) sections.

a. Stack – air quality outdoors. Performing field sampling and analysis following EPA (and ASTM) methods in accordance with 40 CFR Part 60, Appendix A.

b. Indoor - air quality within buildings and structures, especially as it relates to the health and comfort of the occupants. Generally concerned with mold, radon, carbon monoxide or potentially toxic workplace-generated gases or particulate matter. (NIOSH Manual of Analytical Methods incorporates published OSHA, MSHA, EPA, ASTM and ISO methodologies for sampling and analysis.)

c. Ambient – monitoring by systematic, long-term assessment of pollutant levels in outdoor air in accordance with 40 CFR Parts 53 and 58.

II. Solids: grab, composite, Incremental Sampling Methods

Solids include a diverse group of materials including both naturally occurring and products. Naturally occurring solids include sands, sediment, clay, and other natural rock. These may be consolidated or unconsolidated. Trees would be another example of naturally occurring solid material that may need to be sampled. Products that may require sampling, especially for TCLP characterization, include metals, construction debris, and concrete, just to name a few. In each case, the important concept from a sampling perspective, is to collect a portion that is representative of the larger group. It is important that the accrediting body verify that each FSMO has a mechanism in place to identify and develop an appropriate SOP to obtain representative samples. Multiple SOPs may be required to cover all of the intended solid types and should include appropriate distinctions for grab and composite samples.

III. Groundwater: passive diffusion, low flow, pump and bail

Groundwater is defined as water held underground in the soil or in pores and crevices in rock. The sampling methods of groundwater is dictated per the chemical characteristics being analyzed and subsurface conditions. The accreditation body should insure the target groundwater source (e.g.; formation water) is collected rather than unintentional influences (e.g.; stagnant well water) is collected. Standard methodology for sample collection may be modified for site specifics for the accreditation only when accuracy and reproducibility is demonstrated, if possible. Analytical parameters collected during sampling events should

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demonstrate stability within the SOP parameters and reproducibility from sequential sampling events when possible.

IV. Surface water grab, composite

Surface water is water on the surface of the planet such as in a river, lake, wetland, or ocean. The sampling methods of surface water is dictated per the chemical characteristics being analyzed and surface conditions. Standard methodology for sample collection may be modified for site specifics for the accreditation only when accuracy and reproducibility is demonstrated, if possible. Analytical parameters collected during sampling events should demonstrate stability within the SOP parameters and reproducibility from sequential sampling events when possible.

V. Porewater –the water that is in pores in soil and rock. Typically to extract soil pore water from the vadose zone, porous cup Lysimeters are used. There may be other designs for extraction in rock, however, these should be validated before use and well defined in the quality assurance project plan and/or work plan.

VI. Biological samples- biological specimens that can be analyzed for environmental analyses and contaminates of concern. These specimens can be taken as the whole organism which is representative of a selective subset of a population. According to " http://www.biology-online.org/dictionary/Sample" a sample may be defined as the following:

1. A specimen of a whole entity small enough to involve no threat or damage to the whole; an aliquot.

2. A selected subset of a population; a sample may be random or nonrandom (haphazard); representative or non-representative.

Based on the objectives of your study, "representative sample" would be defined in your quality assurance project plan.

VII. Chemical Wastes: grab, composite Larry

Chemical waste includes a diverse group of matrices. These may be consolidated or unconsolidated solids, sludges, and aqueous in a variety of containers (e.g.; open top drums, closed drums, roll offs, etc.). Products that may require sampling, especially for TCLP characterization, include metals, construction debris, and concrete, just to name a few. In each case, the important concept from a sampling perspective, is to collect a portion that is representative of the larger group. It is important that the accrediting body verify that each FSMO has a mechanism in place to identify and develop an appropriate SOP to obtain representative samples. Multiple SOPs may be required to cover all of the intended matrix types and should include appropriate distinctions for grab and composite samples.

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VIII. Biota sampling which can be considered the same as biological samples or specimens and typically is biota tissue samples collected for analysis of contaminants of concern. Same as Biological Sample:

1. A specimen of a whole entity small enough to involve no threat or damage to the whole; an aliquot.

2. A selected subset of a population; a sample may be random or nonrandom (haphazard); representative or non-representative.

Sampling plans for biota must be written to include enough increments to represent the population over a period time and be will defined in your quality assurance project plan or sampling plan.

IX. Other (not otherwise categorized) *Perhaps a spot for the "agricultural products" we were discussing.*

This is where I believe we should stop the subdivision of scope. Further detail should be in the QA Manual, and that is a point of discussion between the AB and the FSMO, not something that should be in the Standard. If our guidance is on scope, we don't need to define technologies. -Maggie

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General Categories – Field Sampling Technologies

a. Geoprobe Sampling is performed by advancing exploratory devices to the subsurface by direct push/percussion. There are two types of devices typically sample for subsurface soils. They can also be set up to sample for soil gas.

b. Grab Sampling - grab sample can be defined as a sample taken from a one sampling location and directly placed into a sampling device or sampling bottle. It is as it sounds, all of the test material is collected at one time and at a single point location. The location chosen must represent the sample stream and be taken from a location that is representative of a well mixed surface water.

c. Composite Sampling - Composite samples are collected, stored, analyzed, tabulated and averaged over an extended period of time and/or area. Composite sampling involves combining the individual samples into one "composite" sample (for example, combining pond water samples taken over the course of two days into one large container). Compositing and subsampling are key links in the chain of sampling and analytical events that must be performed in compliance with project objectives and instructions to ensure that the resulting data are representative of the matrix being sampled. Standard procedures for planning samples are addressed in various standards and should be well thought out and documented in sampling and analytical sampling plans.

d. Incremental sampling methodology (ISM) is a structured composite sampling and processing protocol that reduces data variability and provides a reasonably unbiased estimate of mean contaminant concentrations in a volume of soil targeted for sampling. ISM provides representative samples of specific soil volumes defined as decision units (DUs) by collecting

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numerous increments of soil (typically 30–100 increments) that are combined, processed, and subsampled according to specific protocols.

http://www.itrcweb.org/ISM-1/Executive_Summary.html

d. Collection via a device – specified by ASTM method or other SOPs

e. Lysimeter – porous cup lysimeter is used to extract porewater in soils and rock.

f. Regulatory

General Categories – Field Measurement Technologies

a. X-Ray Fluorescence

b. Immunoassay

c. Gas Chromatography – Volatile Organics

d. Gas Chromatography – Semi-Volatile Organics

e. Sample Preparation Methods

f. Gas Chromatography/Mass Spectrometry – Volatile Organics

g. Gas Chromatography/Mass Spectrometry– Semi-Volatile Organics

h. LC/MS, LC/MS/MS-Analyte Specific

i. ICP

j. IC

k. Dense Non-Aqueous Phase Liquids (DNAPL) Detection Technique

l. Colorimetric In Situ Probes

m. Electrochemical Methods

n. Ion-Specific Electrodes

o. Open-Light Path Techniques

p. Fourier Transform Infrared Spectroscopy

q. Tunable Diode Lasers

r. Direct Sensors

s. Colorimetric Tests (includes kits)

t. Titrametric Tests (includes kits)

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u. Spectrophotometric Tests

v. Analyze Immediately Parameters – dissolved oxygen, pH, temperature, residual chlorine, sulfite. Note: Analyze immediately parameters may be accredited under a laboratory accreditation program that is mandated by a state regulatory requirement to be performed by a NELAP AB or State certification program.

w. Geophysical Test Parameters (Real Time)

x. Geological Techniques

y. Other (not otherwise identified)

Categories – Methods/Programs

i. ASTM

ii. USGS

iii. NIOSH

iv. AOAC

v. EPA

vi. State Specific Sampling methods or requirements(e.g.; New Jersey, Florida, etc.)

vii. Other (to be named specifically as part of the accreditation, such as LQSR for NLLAP)

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g. Air passive

h. Air ambient

i. Air stack