

**SUMMARY OF THE
TNI ENVIRONMENTAL MEASUREMENT METHODS EXPERT COMMITTEE
MEETING
FEBRUARY 3, 2011**

The Committee held a face-to-face meeting at the Forum on Laboratory Accreditation, Savannah, GA, on Thursday February 3, 2011, at 8:30 am EST.

The meeting included several powerpoint presentations that can be found on the TNI website's "previous conferences" pages.

1 – Roll call

The Committee members present introduced themselves, providing brief background information and their interest in serving on this expert committee

Richard Burrows, Test America (Lab)	Present
Brooke Connor, USGS (Other)	Present
Dan Dickinson, NYSDOH (Accreditation Body)	Absent
Tim Fitzpatrick, Florida DEP (Lab)	Present
Nancy Grams, Advanced Earth Technologists, Inc. (Other)	Present
Anand Mudambi, USEPA (Other)	Present
John Phillips, Ford Motor Co., (Other)	Present
Lee Wolf, Columbia Analytical Services (Lab)	Present
Ken Jackson, TNI administrative support staff	Present

2 – Presentation of draft committee charter, mission statement, objectives

Richard Burrows opened the meeting with a brief powerpoint presentation (EMMEC overview.pdf). This included the draft charter provisionally adopted by the EMMEC during its first conference call, and key decisions from initial meetings.

3 – Review Current Options

A review of current options for measurement tools included the following powerpoint presentations by Committee Members:

- Review of "What we want a procedure to do" (WWNPD_Rev.pdf)- John Phillips
- Review of DQ procedure developed by the FAC on Detection and Quantitation in 2008 (FAC_DQ.pdf) – Tim Fitzpatrick
- Review of MDL (MDL overview.pdf) – Richard Burrows
- Review of LCMRL and MRL (LCMRL overview.pdf) – Richard Burrows
- Review of USGS procedures (USGS_LTMDL.pdf) – Brooke Connor
- Review of the ASTM IDE and IQE (ASTM_IDE&IQE.pdf)- Nancy Grams

Brooke Conner next described the TNI DL and QL definitions (TNI_DLQL.pdf).

In the final presentation of the morning session, Richard Burrows reviewed current calibration options (calibration overview.pdf).

4 – Open Forum

The committee again presented the draft charter for review and discussion. It was suggested adding the phrase “using good science and math” to the mission statement, and adding to the objectives: tools for flexible methods (based on DQOs) including method development; and tools for statistical measurement of uncertainty.

An audience member referred to Richard’s earlier presentation that included key decisions from initial meetings, by reminding the committee that prescriptive measurement tools should “*minimize the impact on laboratories*”; e.g., they should consider how short the process can be made when new equipment is installed in a laboratory.

It was suggested by several people that MDL should be dropped as it serves no useful purpose. This led to a prolonged discussion on reporting measurement uncertainty, when MDL would not be needed. Although reporting results with uncertainty limits is scientifically sound, it would be necessary to educate data users to be able to deal with results presented in this way. Bob diRienzo suggested that a data user could tell a laboratory what quality of data it needs, and laboratories already have the data for reporting uncertainty. Anand commented that the committee may need to educate data users as well as developing measurement tools. Richard pointed out that standards will have to be developed that are useable across various EPA programs, so it will be necessary to retain detection and quantitation limits, and MDL is deeply embedded. Brooke pointed out it should not always be necessary for a laboratory to determine MDL; e.g., if concentrations measured and reported are always much higher than the MDL. Nancy also provided the example of only reporting that PCB concentrations are above or below 50 ppm; in such a case it might make sense to just repeatedly run a 50 ppm calibration standard. Arthur Denny suggested a laboratory could provide uncertainty as additional data for interested clients.

5 – Working Meeting

Voting Rules. Prior to making any decisions, the committee needed to agree on voting rules. After some discussion the following motion was presented by Anand and seconded by John:

“The Committee will use the Quality System Expert Committee’s voting procedures until we decide to do something different”.

This was approved unanimously by the Committee Members present. These voting rules are attached.

Committee Charter. The draft charter was discussed and further developed. Richard moved, and Anand seconded adoption of the resulting charter, presented as an attachment:

“It is proposed to adopt the amended charter with Ken’s edits as agreed by the committee”.

The motion was agreed unanimously.

Committee Member Terms. The following terms were agreed:

Richard Burrows – 3 years
Brooke Connor – 3 years
Dan Dickinson – 1 year
Tim Fitzpatrick – 1 year
Nancy Grams – 3 years
Anand Mudambi – 2 years
John Phillips – 2 years
Lee Wolf – 2 years

In accordance with SOP 2-101, on completion of the above terms any Committee Member may be nominated to serve an additional 3 year term.

What should we Tackle First? It was suggested that deciding to start from the results of the FAC on Detection and Quantitation might be too limiting. After some discussion it was decided to defer the decision on this approach. Following a discussion on an “interlaboratory” vs. an “intralaboratory” approach, the following motion was proposed by Richard and seconded by Tim”:

“The Committee will attempt to develop standards for individual laboratory use”.

The motion passed with 6 members in agreement and one abstention.

The Committee decided it should tackle calibration before detection and quantitation, especially since data from the EPA study on the single laboratory DL QL Procedure v2.4 will not be available until later in 2011. The initial approach to calibration will be undertaken by two “brainstorming” groups: Anand, Tim, Lee and John will brainstorm calibration procedures; and Richard, Nancy, Brooke and Arthur Denny (Associate Committee Member) will brainstorm calibration assessment.

Meeting Schedule. The schedule for meetings through the Seattle Forum was decided. There will be monthly conference calls on the first Friday of each month at 1:00 pm

Eastern Time for 1.5 hours. The first call will be March 4. The Committee will schedule a full-day meeting in Seattle. Ken will post the conference call schedule on the website.

Adjournment. The meeting was adjourned at 5:00 pm EST

LIST OF ACTION ITEMS TO BE COMPLETED

Item No.	Date Proposed	Action	Assigned to:	To be Completed by:
1	10/26/10 (by Steering Committee)	Investigate availability of data on EPA study on the single laboratory DL QL Procedure v2.4.	Ken/Anand	Complete
2	1/7/11	Prepare condensed agenda for Savannah meeting and send to Jerry Parr	Ken	Complete
3	2/3/11	Ken will post powerpoint presentations, the committee charter, and future meeting schedule on the website	Ken	February 28
4	2/3/11	A group will brainstorm calibration procedures	Anand, Tim, Lee and John	Ongoing
5	2/3/11	A group will brainstorm calibration assessment	Richard, Nancy, Brooke and Arthur Denny	Ongoing

**Agenda; Environmental Measurement Methods Expert Committee
8:30 – 5:00**

Committee Chair: Richard Burrows, TestAmerica

This new committee (formed in January 2011) will develop measurement tools to improve the quality of method information, understanding, and flexibility. This will include measurement tools for the calculation of limits of detection, limits of quantitation, calibration curves, and other related values with the most common and diverse techniques.

AGENDA

8:30 Present draft committee charter, mission statement, objectives
Review current options for measurement tools
TNI DL/QL presentation
Review current calibration options

11:00 Open forum

12:00 Lunch

1:30 Working meeting

Ground rules (see and select from TNI SOPs); Vote on Charter, mission statement, objectives; Agree on terms for each member; Develop schedule for subsequent meetings; What do we want to tackle first? Approach to detection limit procedure; Approach to quantitation limit procedure; Approach to calibration; Any final votes

Decision-Making Rules for Environmental Measurement Methods Expert Committee Operations

Type of Decision	Decision-Making Rule
Meeting dates, times	Person-in-charge decides after discussion
Meeting adjournment	Person-in-charge decides after all business is conducted or allotted time expires
Meeting minutes approval	Request for approval by email to all committee members – changes approved if needed from email. No Vote
Meeting cancellations	Person-in-charge decides
Addition of Committee members	Two-thirds of committee must vote and simple majority vote
Removal of Expert Committee Members	Person-in-charge decides after discussion
Approval of Standards – any stage	Two-thirds of committee must vote and simple majority vote
Creation of a new subcommittee	Simple vote of attendees
Election of Committee Chair	Two-thirds of committee must vote and simple majority vote

COMMITTEE CHARTER

1. Committee Name: Environmental Measurement Methods Expert Committee	2. Version: 1	3. Date: February 3, 2011
4. Mission Statement: To improve the technical quality of environmental testing methodologies by providing tools (e.g., detection, quantitation and calibration) that assure the quality of data, which may be adopted by federal and state regulatory agencies. It is important that a balance between impact on laboratories and improvement in technical quality be maintained during this process.		
5. Committee Sponsor:		
6. Committee Members: <i>(indicate Chairperson, insert rows as necessary for additional members)</i>		7. Interest Category & Stakeholder Group:
Richard Burrows, TestAmerica, Arvada, CO (Chair)		Laboratory
Brooke Connor, USGS, Denver, CO		Other
Dan Dickinson, NYSDOH, Albany, NY		Accreditation Body
Tim Fitzpatrick, Florida DEP, Tallahassee, FL		Laboratory
Nancy Grams, Advanced Earth Technologies Inc., Cocoa Beach, FL		Other
Anand Mudambi, USEPA, Washington, DC		Other
John Phillips, Ford Motor Co., Dearborn, MI		Other
Lee Wolf, Columbia Analytical Services, Kelso, WA		Laboratory
8. Objectives: <i>(insert rows as necessary for additional objectives)</i>		
✓ A. Create and adopt standards to support a strong technical approach to quantitation.		
✓ B. Create and adopt standards to support a strong technical approach to detection.		
✓ C. Create and adopt standards to support a strong technical approach to calibration.		
✓ D. Develop standards that are useable across various EPA and state programs.		
✓		
✓		
✓		
9. Success Measures: Adoption of standards into TNI requirements for laboratory accreditation		
10. Key Milestones: <i>(significant events and corresponding dates)</i>		
11. Considerations: <i>(assumptions/constraints/obstacles/risks)</i>		
✓ Developed tools should address: data comparability; flexible methods assessment; statistical assessment; uncertainty.		
✓ Any standard developed should incorporate data quality objectives.		
✓ Effective communication of standards and tools		
12. Available Resources: Committee members are volunteers. Some travel money to attend biannual Forum on Laboratory Accreditation		
13. Additional Resources Required: Funding to test tools that are developed		
14. Anticipated Meeting Schedule: <i>(specify meeting format and frequency)</i> Monthly conference calls. Periodic face-to face meetings		