SUMMARY OF THE
ENVIRONMENTAL LABORATORY ADVISORY BOARD MEETING
Measurement and Technology Workgroup
Teleconference: 1-888-621-3673/31482011#
June 5, 2012; 2:00 – 3:00 p.m. EDT

The U.S. Environmental Protection Agency (EPA) Environmental Laboratory Advisory Board (ELAB or Board) Measurement and Technology Workgroup teleconference was scheduled on June 5, 2012, from 2:00 to 3:00 p.m. EDT. The workgroup met with staff from EPA's Office of Water (OW) regarding the Post Federal Advisory Committee on Detection and Quantitation (FACDQ) Pilot Study Report. A list of meeting participants is provided as Attachment A. Attachment B details the action items identified during the teleconference. Attachment C lists questions posed to EPA OW staff concerning the Post FACDQ Pilot Study Report.

The Measurement and Technology Workgroup assists the Board in dealing with a variety of matters under discussion and distributes the workload in information gathering for the Board's consideration. These minutes do not in any manner represent the full consensus of the Board. Significant discussions and outcomes from these minutes will be presented to the full Board for its consideration at a later date.

OPENING REMARKS/ROLL CALL

Mr. John Phillips welcomed the participants to the call and took roll.

POST FACDQ PILOT STUDY REPORT

The purpose of the conference call was to meet with OW staff and discuss the questions that the Workgroup had developed prior to the teleconference (Attachment C). Ms. Jan Matuszko (OW) stated that although the OW is interested in the Workgroup's proposals, it has limited monetary and staffing resources. Even if more resources were available, pursuing an alternative to the current method detection limit (MDL)/minimum limit (ML) would not be a high priority at the EPA. Mr. Phillips noted the need for the OW's oversight of the quality and scope of any data-gathering activities conducted in support of this effort. Ms. Matuszko indicated that this might not be possible as it would require redirecting staff.

Ms. Matuszko clarified that a new method of determining MDLs would be a major policy change for the agency and would require a new rulemaking and public comment. The EPA might choose not to propose a new rulemaking; if the rulemaking were to go forward, however, there is no guarantee that it would become final, although that is the typical outcome. Ms. Matuszko and Dr. Maria Gomez-Taylor (OW) were in agreement that an approach similar to that recommended by the FACDQ Pilot Study Report is the most likely to succeed, based on the extensive work already performed. Previously collected data could be incorporated into the results of the new study if new data are collected using similar approaches. Dr. Gomez-Taylor suggested that one possibility is to establish a long-term MDL if a laboratory's MDL is stable over time.
Dr. Richard Burrows agreed that this is a possible path forward, although he noted that blanks are a consideration.

Ms. Matuszko suggested that the Workgroup submit to the EPA for review a plan of how it would investigate alternatives to the current MDL/ML. The plan would outline which methods and analytes (for multi-analyte methods) to include and the number of laboratories that would participate. Dr. Gomez-Taylor indicated that although it would not be possible to include all of the hundreds of EPA methods, the plan should capture methods for a variety of analytes (e.g., anions, pesticides). It only should include analytes for which a multi-analyte method performs well. Data from permitting would indicate those analytes that are the most important. The same data quality objectives (DQOs) as used in the FACDQ Pilot Study should be used. For method validation studies, typically at least six laboratories are needed to provide high-quality data sets, and this number likely would be sufficient to withstand public comment. For validation studies, laboratories must be experienced in the method and submit the most recent year's MDL data. Laboratories should follow the method exactly, seeking prior EPA approval for any deviations and fully documenting them. Dr. Gomez-Taylor advised that prior to beginning the study, a teleconference should be held that would be attended by all of the participating laboratories. The statistical criteria to be used in data analysis should be included in the plan for review and performed using ELAB resources. Ms. Matuszko suggested having the plan peer-reviewed, which the EPA could organize, including identifying reviewers and paying them a small honorarium.

Dr. Gomez-Taylor asked about the overlap between the activities of the ELAB Measurement and Technology Workgroup and The NELAC Institute's Technology and Innovation Workgroup. Mr. Phillips replied that the two groups do not coordinate their activities but have overlapping membership, including himself and Dr. Burrows.

Ms. Matuszko asked the Workgroup how committed it is about pursuing this effort. Mr. Phillips stated that it depends on the interest of ELAB stakeholders, including environmental laboratories, industry, states and municipalities, but representing industry, he can attest to its strong interest. Dr. Burrows concurred that environmental laboratories also have a strong desire to change the MDL determination method. As early as 2003, multiple stakeholders brought this issue to the attention of the EPA in a memorandum entitled *National Consensus on Detection and Quantitation Levels*, addressed to Mr. G. Tracy Mehan, III, the EPA OW's Assistant Administrator. Among the 30 to 40 signatories were many stakeholders and trade associations, including representatives of ASTM International, the American Chemistry Council and the American Council of Independent Laboratories. The agency responded by forming the FACDQ and expending extensive resources to study the issue during the past several years. Ms. Matuszko reiterated that current resources are limited, and decisions on how to allocate resources are made at a higher administrative level than that of herself and Dr. Gomez-Taylor. In addition, the EPA OW found no clear consensus on how to proceed on this issue in the FACDQ Pilot Study Report.

Mr. Phillips told Ms. Matuszko and Dr. Gomez-Taylor that the Workgroup will present its findings at the upcoming August 2012 ELAB face-to-face meeting in Washington, D.C. After discussion by the full Board, the Workgroup will contact the EPA. Ms. Matuszko gave the Workgroup her contact information and indicated that she will be the Workgroup's contact after Dr. Gomez-Taylor retires at the end of June 2012. There being no further questions about the FACDQ Pilot Study Report, Mr. Phillips thanked Ms. Matuszko and Dr. Gomez-Taylor, and they left the meeting.

DQO PROJECT

Mr. Phillips updated the Workgroup on his progress investigating the use of DQOs at the EPA's OW. A search of the literature revealed little evidence that the OW uses DQOs. Mr. Phillips contacted several EPA staff members about DQOs at the OW. Mr. John Warren (EPA Quality Staff) said that most EPA offices, except the OW, have DQO procedures in place. Dr. Michael Messner (Office of Ground Water and Drinking Water) told Mr. Phillips that the OW does not have written DQO procedures. Dr. Cuc Schroeder (OW) indicated that the OW often does not know the quality of data it is given, especially if it comes from a secondary source. She also stated that the OW does not have a DQO process. Ms. Marion Kelly (EPA Office of Water Information Quality Guidelines) told Mr. Phillips that DQO procedures employed for each promulgated rule or method are documented in the dockets established when they were proposed. In addition, some of the larger states set their own DQOs. Mr. Phillips proposed a meeting of the Workgroup on DQOs and asked members to examine dockets to determine the DQO process established for methods. Ms. Silky Labie confirmed that the OW relies on the DQOs (method quality objectives for method quality indicators) embedded in approved methods, but not all methods have DQOs (methods quality assurance/quality control performance criteria). Mr. Phillips said that his impression is that if a method is followed, the OW considers the DQOs to be met. Dr. Reza Karimi noted that the OW does not operate like the Office of Solid Waste and Emergency Response under the Resource Conservation and Recovery Act. Ms. Labie pointed out that it is difficult to compare offices because they have different missions.
Mr. Phillips proposed a meeting of the Workgroup at lunchtime at the August 2012 ELAB face-to-face meeting. Dr. Burrows, Dr. Karimi and Ms. Labie agreed. Mr. Phillips said that he will arrange the logistics of the meeting room and food.

CLOSING REMARKS/ADJOURNMENT

Mr. Phillips thanked the participants for attending and adjourned the meeting at 3:12 p.m.

Attachment A

MEMBERSHIP LISTING AND GUESTS
ELAB Measurement and Technology Workgroup Teleconference with EPA OW Staff

June 5, 2012; 2:00 p.m. – 3:00 p.m. EDT

Attendance (Y/N)	Name	Affiliation
Y	Mr. John H. Phillips (Chair)	Ford Motor Company
N	Ms. Lara P. Autry, DFO	EPA
Y	Dr. Richard Burrows	Test America Inc.
N	Mr. John (Jack) E. Farrell, III	Analytical Excellence, Inc.
Y	Dr. Reza Karimi	Battelle Memorial Institute
N	Dr. H. M. (Skip) Kingston	Duquesne University
Y	Ms. Sylvia (Silky) S. Labie	Environmental Laboratory Consulting & Technology, LLC
Y	Dr. James (Jim) Pletl	Hampton Roads Sanitation District
Y	Dr. Maria Gomez-Taylor (Guest)	EPA OW
Y	Ms. Jan Matuszko (Guest)	EPA OW
Y	Ms. Jenny Lee (Contractor)	The Scientific Consulting Group, Inc.

Attachment B

ACTION ITEMS

1. Workgroup members will examine the dockets of OW methods to determine the DQO process established therein.

2. Mr. Phillips will arrange the logistics of the meeting room and food for a lunchtime meeting of the Workgroup at the August 2012 ELAB meeting.

Attachment C

Questions for OW Concerning the Post FACDQ Pilot Study Report

1. Is the EPA serious in pursuing an alternative to the current MDL/ML?

2. If so, would the EPA consider a completely new procedure akin to the DQFAC procedures evaluated in the Post FACDQ Pilot Study?

3. Would the EPA be interested in pursuing relatively minor revisions to the current MDL procedure if it could achieve some of the key benefits of the DQFAC procedure?

4. Which specific additional methods would need to be assessed to demonstrate that a new/revised procedure works across a broad range of methods?

5. For the multi-analyte methods, how many and which analytes would need to be assessed?

6. For statistical purposes, how many laboratories would need to generate valid data for each method/analyte combination?

7. Would there be any laboratory selection criteria, and if so, what would those criteria be?

8. What specific procedures and protocols would be followed, for example, the same as the Post FACDQ Pilot Study?

9. How strictly must laboratories adhere to the study guidelines for their data to be accepted?

10. Would the same DQOs be used as in the Post FACDQ Pilot Study?

11. What statistical level of confidence is required to constitute a significant difference in outcomes?

12. Could data from the second FACDQ pilot study or even the first pilot study be used to add to the current body of data?

13. Will the agency perform the statistical analysis of the data or will that be the responsibility of a third party?

14. Does the OW have any funding for this effort in 2012 and beyond?

15. If so, what might the funding cover and where are the funding gaps?

16. Besides monetary funding what other resources would the EPA be able to commit to this effort?