SUMMARY OF THE
ENVIRONMENTAL LABORATORY ADVISORY BOARD MEETING
Teleconference: 866-299-3188/9195415544#
September 17, 2014; 1:00 – 3:00 p.m. EDT

The U.S. Environmental Protection Agency's (EPA) Environmental Laboratory Advisory Board (ELAB or Board) teleconference was held on September 17, 2014. The agenda for this meeting is provided as Attachment A, a list of the participants is provided as Attachment B, and action items from the teleconference are included as Attachment C. The official certification of the minutes by the Chair or Vice-Chair is included as Attachment D.

AGENDA ITEMS:

1. INTRODUCTIONS OF ALL BOARD MEMBERS AND OPENING REMARKS

Ms. Patsy Root, Chair of ELAB, and Ms. Lara Phelps, Designated Federal Official of ELAB, welcomed participants to the teleconference and called an official roll of the Board members and guests. Ms. Root thanked the departing members for their service to ELAB: Mr. Jack Farrell, Mr. Dave Speis, Dr. Richard Burrows, Dr Michael Wichman, Ms. Ruth Forman and Mr. John Phillips. Mr. Speis expressed his appreciation for being able to participate on the Board and serving with such excellent individuals. He encouraged the new members to maximize the opportunities that they have to effect change in the environmental laboratory field. Mr. Farrell agreed, adding that ELAB has forged relationships with EPA staff, and he encouraged the new members to maintain these relationships. Dr. Wichman and Dr. Burrows agreed with Mr. Speis and Mr. Farrell's remarks. Mr. Farrell thanked Ms. Phelps for her leadership, which has allowed the Board to move in the right direction. Ms. Phelps added her thanks to the outgoing members for their service, dedication and energy. It has been a privilege to work with dedicated individuals who hold a variety of perspectives, and she welcomed their continued participation in Board activities. Ms. Phelps agreed to honor Mr. Farrell's request to remain on the ELAB distribution list.

2. BOARD TRANSITIONS/TIMELINES

Ms. Phelps reported that the new members would receive their official letters of appointment in the mail within the next week or so. An administrative meeting to orient new Board members will be held on October 1, 2014, from 1:00 to 2:00 p.m. EDT. Dr. Dallas Wait agreed that orientation for new members is important. Ms. Root expressed her appreciation for Ms. Michelle Wade's service as Vice-Chair and Ms. Patricia Carvajal's willingness to serve as incoming Vice-Chair. Ms. Phelps thanked Ms. Root for extending her time serving as Chair.

3. APPROVAL OF AUGUST MINUTES

Ms. Root asked whether any members had comments regarding the August face-to-face meeting minutes. Dr. Wait said that a line on page 8 should read, "Dr. Burrows responded that acceptable detection limits are possible even without a heated purge and trap." rather than

"Dr. Burrows responded that acceptable detection limits are possible even without Method 624." Mr. Speis moved to accept the minutes with the change, and Dr. Wait seconded the motion. The Board approved the corrected August minutes unanimously with one abstention.

4. UPDATES ON CURRENT TOPICS

Method Update Rule (MUR)

Ms. Root explained that ELAB members had met with Mr. Adrian Hanley (EPA) regarding the MUR, and EPA expects that the MUR will be published in December 2014, with a 60-day comment period that may be extended to 90 days. During the meeting, EPA staff expressed appreciation for the Board's input and noted that many of ELAB's suggestions had been implemented. The Board has been invited to provide input during each biannual MUR update cycle prior to publication.

Dr. Mahesh Pujari asked about continuing efforts regarding Method 624. Mr. Speis responded that EPA had incorporated most of the Board's suggestions. Ms. Root added that it is helpful for the Board to provide positive comments as well as constructive criticism. Ms. Wade recommended that a Task Group be formed prior to the publication of the MUR so that the Board is ready to provide comments during the comment period. Ms. Root agreed that it will be important to be as timely as possible. She added that during the meeting about the MUR, ELAB complimented the Agency for its inclusion of 40 CFR 136.7. The Agency recognizes that the criteria currently are not as complete as possible (e.g., lack of microbiology), and Mr. Farrell had suggested that allowing the use of certain quality control (QC) sections of The NELAC Institute (TNI) standards, which include microbiology, in lieu of 40 CFR 136.7 would be a beneficial inclusion as well.

Mr. Farrell said that a related topic to consider is how to make the community aware that the two programs (TNI standards and the NELAC program) are separate. Mr. Speis added that one new task originating from the MUR meeting was to examine limits included in permits that are not attainable with the current methodology. Mr. Farrell reiterated that ELAB should work with EPA early in the MUR process to address some of these issues. Dr. Pujari noted that permit writing is a complex process. Ms. Root agreed that this is the part of the issue that Mr. Speis had mentioned. Dr. Wichman said that this issue relates to Ms. Silky Labie's efforts regarding data quality objectives (DQOs) and involving laboratories in the DQO process from the beginning.

Acrylonitrile and Acrolein

Dr. Burrows explained that ELAB had sent suggestions to the Office of Water regarding acrylonitrile and acrolein, but the Board has not received an official response. Dr. Pujari thought that a note should be sent to Mr. Hanley or Mr. Lem Walker (EPA) about including Method 624 in the MUR. Mr. Speis said that this recommendation already was included in the letter that the Board previously sent. If it is not included in the published MUR, this is an issue that the Board can continue to address with the Agency.

Polychlorinated Biphenyls (PCBs)

In terms of the PCB effort, Dr. Pujari has been extremely busy and unable to schedule a meeting of the Task Group. Dr. Pujari will provide the new Board members with an update about the goal of the effort via email. Mr. Phillips volunteered to serve on the Task Group as a non-ELAB member.

Dr. Burrows noted that because of the ubiquitousness of PCBs, use of Method 1668 to analyze for PCBs will not meet permits with PCB requirements of zero. There are, however, methods that are not as sensitive as Method 1668 that can be considered as alternative options. EPA is attempting to determine which method could be promulgated for PCBs that would be superior to Method 608 but not as sensitive as Method 1668. Dr. Pujari said that the use of Method 608 for PCBs has been crude, prompting the community to explore PCB congeners as an alternate. He would like to obtain scientifically defensible data regarding congeners in a cost-effective manner. Dr. Burrows thought that, rather than a lack of data, the problem is that the permits do not mention congeners. Dr. Pujari said that California is beginning to issue congener-based permits. Mr. Phillips agreed with Dr. Burrows and commented that whichever method the Board might recommend must have the capability of identifying aroclors while measuring congeners. EPA is actively seeking input regarding this issue, and ELAB is the best group to provide the requested input. Mr. Farrell said that it is important to consider the practicality and capital (financial) costs; if the cost is too high, it will not be regulated. An incoming ELAB member noted that the methods must be performance-based with the ability to measure performance. This would allow the laboratory to be flexible and provide the best data for communities.

Methods Harmonization

Dr. Wait explained that the Agency had responded to the Board's letter regarding methods harmonization, and it does not appear as though significant efforts in this area by ELAB would be helpful at this time. There may be an EPA misperception that ELAB was suggesting that the Agency harmonize all methods. Ms. Phelps explained that Mr. Michael Shapiro (EPA) has requested that the Forum on Environmental Measurements (FEM) examine this issue. A working group has met once and will meet the following week about whether there are "out of the box" solutions to help offices and programs embrace harmonization when statutory limitations are not present.

Ms. Root said that it would be helpful for the Agency to identify the key elements that should be considered when updating a rule, particularly in terms of elements that should be consistent among methods. Ms. Phelps explained that this was one of the topics that the FEM is addressing. She added that the FEM examines issues in a broad, cross-Agency manner and will not address issues related to a single medium. Ms. Aurora Shields appreciated the formation of such a FEM workgroup and noted that the Board should remain as aware as possible of rule updates so that ELAB can provide input regarding harmonization at every opportunity. Mr. Farrell agreed that it was necessary for ELAB to be persistent and aware, and he was comfortable with EPA's response, especially now that the Agency is aware that the Board is willing and able to provide input. Ms. Shields said that the Agency must be specific about the role it would like ELAB to take, or the Board must educate itself so that it is ready to act on any opportunity to help EPA harmonize methods.

Ms. Root stated that the Board will respond via email thanking EPA for the thoughtful response and considering the points that ELAB had introduced. The email will indicate that ELAB looks forward to working with the Agency on harmonization issues as opportunities arise in the future.

Interagency Data Quality Task Force/DQO Process

Dr. Wichman reported that the Task Group devoted to connecting with the Interagency Data Quality Task Force had met via teleconference and discussed involving laboratories earlier in the DQO process, which will help address the issues regarding unattainable permit limits that Mr. Speis mentioned earlier in this teleconference.

5. NEW TOPICS/ISSUES FOR CONSIDERATION

Ms. Root explained that the Board had received an email from the TNI Proficiency Testing (PT) Program Executive Committee (PTPEC) Chair regarding the variations among states in whole effluent toxicity (WET) testing and which PT should be used. Ms. Shields noted that the Board advises the Agency, but the email asks that the Board advise TNI. An incoming ELAB member said that the link between EPA and TNI could be permits, which vary among states. Ms. Shields thought that the EPA State Discharge Monitoring Report-Quality Assurance (DMR-QA) Coordinator could be a starting point in answering the question. In response to a question from Ms. Root, Ms. Shields explained that WET testing is included in the DMR-QA program, although she was not sure that staff at EPA still monitored this program at such a detailed level. She thought that some portions of the program had been delegated to TNI. Dr. Pujari provided an example of DMR-QA use in California.

Ms. Root thought that this topic should be tabled until after the membership transition and discussed during the October Board meeting. She agreed with Ms. Shields that this was not within the Board's charter to address currently, but on a personal level, she thought that the laboratory should use the PT required by its state. Ms. Shields thought that the PTPEC should be referred to the EPA State DMR-QA Coordinator. At that point, if the Agency would like ELAB's input, the Board can provide it. Ms. Phelps agreed.

Ms. Root noted that participants at the August face-to-face meeting recommended that ELAB examine the issue of selected ion monitoring (SIM). Dr. Burrows explained some SIM issues (e.g., how many scans are needed over a peak for proper characterization, the necessary confirmation ions to identify a compound), noting that the difficulty is whether the variables are the same for all SIM methods and uses. Mr. Phillips agreed that these are critical issues and wondered whether the technology is moving fast enough that it ultimately may be a moot point. Mass spectrometry often is able to perform a full scan with the SIM and attain adequate sensitivity. A full scan may not be good enough for quantitation, but it may be good enough for confirmation. Dr. Burrows thought that this would make it more likely that there are not enough scans over the peak, even with relatively modern instrumentation.

Ms. Shields said that her laboratory does not obtain the required specificity when running SIM and scans simultaneously, so SIM analysis must be performed alone. Mr. Speis commented that in addition to the operational conditions that Dr. Burrows described, the approaches referenced in existing methodologies lack fundamental QC elements. Dr. Charlie Carter (incoming ELAB

member) agreed that the methods need this. As a practical consideration, he noted that even if technology eliminates this need, the laboratory has a suite of instruments that will not be replaced for at least a decade; therefore, SIM will continue to be used indefinitely. Ms. Shields wondered what ELAB's goal should be for this effort; what was the expectation of the community when it introduced this topic to the Board?

Dr. Pujari noted that many laboratories must report low analyte levels, which requires the use of liquid chromatography/mass spectrometry methods. Use of SIM methods allow the laboratory to meet the permit concentration levels without the need to purchase additional equipment. In response to a question from Ms. Shields, Dr. Pujari stated that SIM analysis can definitively identify the required compound, but the method must be developed carefully.

Ms. Root asked whether SIM analysis was only used for Methods 8260 and 8270 for compliance. Dr. Pujari provided an example from his state, in which a modified Method 8270 SIM methodology has been approved. Ms. Root said that this topic could be discussed with the Agency at the next face-to-face meeting. Mr. Henry Liebovitz (incoming ELAB member) noted that Method 522, a drinking water method, is specifically designed for SIM. An incoming Board member commented that SIM criteria should be explicit; this is a very important topic.

Dr. Burrows thought that if the Board moved forward, the FEM would be the appropriate entity with which to work on this topic. ELAB's approach should be to contact the Agency, noting that the Board has noticed a lack of appropriate QC controls for some EPA SIM techniques, and ask whether the Agency would like ELAB's input on what controls should be added to the methods so that the analysis is generating data of known quality. Ms. Phelps agreed that the Board could approach the FEM to determine the breadth of interest among programs to address this issue. The FEM then can direct ELAB how to proceed in addressing the issue. Mr. Leibovitz volunteered to be on the Task Group, should one be formed around this topic.

Ms. Shields moved to send a letter to the FEM, using Dr. Burrow's suggested language, indicating that this issue has been broached to ELAB; Dr. Pujari seconded the motion, which was approved unanimously. The incoming members cannot be involved in writing the letter but are able to provide input to Ms. Root, who will write the letter.

Because there was not enough time to discuss the Sufficiently Sensitive Methods effort, Mr. Phillips will provide an update via email.

6. WRAP-UP/REVIEW ACTION ITEMS

Ms. Kristen LeBaron reviewed the action items identified during the meeting, which are included in Attachment C.

7. CLOSING REMARKS/ADJOURNMENT

Dr. Wichman moved to close the meeting, and Mr. Phillips seconded the motion. The meeting was adjourned at 3:00 p.m.

Attachment A

AGENDA
ENVIRONMENTAL LABORATORY ADVISORY BOARD
Monthly Teleconference: 866-299-3188/9195415544#
September 17, 2014; 1:00 – 3:00 p.m. (EDT)

Introduction of All Board Members	All
Opening Remarks	Phelps
Board Transitions/Timelines	Phelps
Approval of August Minutes	Root
Updates on Current Topics	All
Method Update Rule	
Acrylonitrile and Acrolein	
Polychlorinated Biphenyls	
Methods Harmony	
Interagency Data Quality Task Force/Data Quality Objectives Process	
New Topics/Issues for Consideration	Root
WET Testing	
Wrap-Up/Review Action Items	Root/LeBaron
Closing Remarks/Adjourn	Root

Attachment B

MEMBERSHIP LISTING AND GUESTS

ELAB TELECONFERENCE
September 17, 2014; 1:00 p.m. – 3:00 p.m. EDT

Attendance (Y/N)	Name	Affiliation
Y	Ms. Patsy Root (Chair)	IDEXX Laboratories, Inc. Representing: Laboratory Product Developers
Y	Ms. Michelle L. Wade (Vice-Chair)	Kansas Department of Health and the Environment Representing: Laboratory Accreditation Bodies
Y	Ms. Lara P. Phelps, DFO	U.S. Environmental Protection Agency Representing: EPA
Y	Dr. Richard Burrows	TestAmerica Laboratories, Inc. Representing: Commercial Laboratory Industry
Y	Ms. Patricia M. Carvajal	San Antonio River Authority Representing: Watershed/Restoration
Y	Mr. John (Jack) E. Farrell, III	Analytical Excellence, Inc. Representing: The NELAC Institute (TNI)
N	Ms. Ruth L. Forman	Environmental Standards, Inc. Representing: Large Third-Party Assessors
N	Ms. Sylvia (Silky) S. Labie	Environmental Laboratory Consulting & Technology, LLC Representing: Third-Party Assessors
N	Ms. Susan L. Mazur	Florida Power and Light Representing: Utility Water Act Group
Y	Mr. John H. Phillips	Ford Motor Company Representing: Alliance of Automobile Manufacturers
Y	Dr. Mahesh P. Pujari	City of Los Angeles Representing: National Association of Clean Water Agencies (NACWA)
N	Dr. James N. Seiber	University of California, Davis Representing: Academic and Research Communities
Y	Ms. Aurora Shields	City of Lawrence, Kansas Representing: Wastewater Laboratories
Y	Mr. David (Dave) N. Speis	QC Laboratories Representing: American Council of Independent Laboratories (ACIL)
Y	Dr. A. Dallas Wait	Gradient Representing: Consumer Products Industry
Y	Dr. Michael D. Wichman	State Hygienic Laboratory at the University of Iowa Representing: Association of Public Health Laboratories (APHL)

Attendance (Y/N)	Name	Affiliation
Y	Ms. Kristen LeBaron (Contractor)	The Scientific Consulting Group, Inc. (SCG)
Y	Dr. Charlie Carter (Guest)	Test America
Y	Dr. Mike Delaney (Guest)	Massachusetts Water Resources Authority
Y	Mr. Michael (Mike) Flournoy (Guest)	Eurofins Frontier Global Sciences, Inc.
Y	Dr. Deyuan (Kitty) Kong (Guest)	Chevron
Y	Mr. Henry Leibovitz (Guest)	Computer Science Corporation
Y	Ms. Cindy Nettrour (Guest)	American Water

Attachment C

ACTION ITEMS

1. Ms. LeBaron will finalize the August 2014 meeting minutes and send them to Ms. Phelps via email.

2. Dr. Pujari will send an email to the new Board members, providing them with an update about the goal of the PCB effort.

3. Ms. Root will thank the Agency via email for its consideration of the Board's method harmonization suggestions.

4. Ms. Root will respond to the TNI PTPEC, indicating that EPA would need to involve ELAB regarding the WET PT issue, as the Board cannot advise TNI.

5. Ms. Root will send a letter to the FEM indicating that issues surrounding SIM analysis have been broached to ELAB.

6. Mr. Phillips will send an update via email regarding the Sufficiently Sensitive Methods effort.

7. Ms. Phelps will send information about the new Board members so that ELAB members can update their email address books.

Attachment D

I hereby certify that this is the final version of the minutes for the Environmental Laboratory Advisory Board Meeting held on September 17, 2014.

P Root

Signature Chair

Ms. Patsy Root

Print Name Chair