

US EPA ARCHIVE DOCUMENT

**SUMMARY OF THE
ENVIRONMENTAL LABORATORY ADVISORY BOARD MEETING
Teleconference: 866-299-3188/9195415544#
March 19, 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 March 19, 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. OPENING REMARKS

Ms. Michelle Wade, Vice-Chair of ELAB, and Ms. Lara Phelps, Designated Federal Official (DFO) of ELAB, welcomed participants to the teleconference and called an official roll of the Board members and guests.

2. APPROVAL OF FEBRUARY MINUTES

Ms. Wade asked whether any members had comments regarding the February minutes; there were none. Mr. Dave Speis moved to accept the minutes, and Ms. Patricia Carvajal and Dr. Mahesh Pujari simultaneously seconded the motion. The Board approved the February minutes unanimously with no discussion. Dr. Pujari asked for references to "collagen" to be changed to "collision."

Dr. Dallas Wait asked how often there are problems with the minutes. Ms. Phelps responded that since The Scientific Consulting Group, Inc. began providing the minutes, there has not been a problem. Mr. John Phillips noted that occasionally there are minor changes but generally nothing substantive. Ms. Phelps explained that the minutes generally are accurate to what was spoken, and most changes occur because individuals realized that they were not clear enough in their original statements.

3. UPDATES ON CURRENT TOPICS

As a result of the changes to federal workgroup structure, the standing ELAB Workgroups were dissolved, and *ad hoc* task (topic) groups were formed based on Board topics and activities.

Ms. Wade congratulated the Board on receiving a positive response letter from Dr. Michael Shapiro (EPA) regarding ELAB's work on the conversion from helium to hydrogen. She noted that the Agency had not yet responded to the Board's letter regarding method detection limits. Mr. Phillips said that if the Agency does not respond, the effort is complete, unless ELAB is asked to review a different revision or proposal. The Board did not request a response in its letter. Dr. Richard Burrows stated that the Agency has asked The NELAC Institute (TNI) for a copy of its proposed MDL, so the effort is moving forward within EPA. There was Board

consensus that there was no need to follow up with the Agency as ELAB did not request a response.

The Board also has not received a response to either of its two letters regarding the Method Update Rule (MUR). Ms. Wade volunteered to send a follow-up email to Mr. Lem Walker (EPA). Mr. Speis explained that Mr. Walker and Mr. Adrian Hanley (EPA) had presented the day prior at the American Council of Independent Laboratory (ACIL) Mid-Winter Meeting, and he could obtain and distribute the presentation slides to the Board members.

Ms. Wade asked whether ELAB members had suggestions for next steps in response to Mr. Hanley's presentation about Office of Water (OW) upcoming topics. Dr. Pujari had questions about Method 624 in regard to pH and acrylonitrile and acrolein. Dr. Burrows did not think that it was possible to effectively preserve samples at pH levels of four to five, and he had forwarded studies to Mr. Hanley regarding acrylonitrile's stability at a pH of two and suggested the removal of the pH requirement. This could be a topic of interest to the Board, as the requirement causes confusion and rejection of data. Dr. Pujari agreed, noting several of his experiences; he would like to request clarification from EPA. Dr. Burrows thought that a note from ELAB referencing relevant studies indicating compound stability at a pH of two and requesting that the requirement be removed from 40 CFR Part 136 would be sufficient to address the topic.

Mr. Speis asked whether acrylonitrile and recommended pH were present in the Method 624 list. Dr. Burrows responded that this was the case, and other compounds were included as well. Another item of note is that Method 624 states that Method 603 is preferred, but Method 603 is not a quality method and causes many kinds of interferences with acrylonitrile. In response to a question from Ms. Aurora Shields, Dr. Burrows explained that the requirements were copied from Method 624 into Method 8660. Ms. Shields commented that this could be a methods harmonization project. Dr. Burrows suggested recommending to EPA that the preservation requirements in 40 CFR Part 136 be updated.

Mr. Speis noted the gas chromatography (GC) methods mentioned in the 600 series of methods, stating that he did not think that laboratories used these methods anymore, as Methods 624 and 625 are preferred. When Clean Water Act monitoring began, the use of GC caused a financial disadvantage for small laboratories. Should ELAB be suggesting that the use of GC/mass spectrometry (MS) methods for these analytes is much preferred and recommended? He thought that GC methods have outlived their usefulness. Dr. Wait agreed, noting that adaptable methods were necessary in the past because many laboratories did not have GC/MS units. Occasionally, lower detection limits required GC methodology on a case-by-case basis. Finally, some well-defined waste streams still require GC methods when GC/MS methods are not available. Ms. Ruth Forman and Mr. Phillips agreed with Mr. Speis' recommendation. Mr. Phillips added that emphasis should be shifted to GC/MS methods without removing the GC methods. Dr. Wait stated that there still is a need for some GC methods, so they are not completely obsolete.

Dr. Burrows volunteered to draft a letter regarding the acrylonitrile issue and moved that the Board address this issue. Mr. Speis asked whether the recommendation about the use of GC/MS methods rather than GC methods should be added to this letter. Dr. Burrows did not think that it would be beneficial to address both topics in a single letter because criticizing the GC methods may set the wrong tone with the Agency. He recommended addressing the GC issues in a

separate letter, and Mr. Speis agreed with this approach. Dr. Pujari seconded Dr. Burrows' motion, which passed unanimously.

Dr. Jim Seiber was interested in nanomaterial analytical methods, which Mr. Hanley had broached during his presentation. Mr. Speis said that Mr. Hanley had presented on nanomaterials the previous day at the ACIL meeting, but the topic still is nebulous. Dr. Seiber thought that a presentation about available or developing methods would be beneficial for ELAB. Mr. Phillips is a member of an ASTM International nanomaterials group, and there are not many methods specific to nanomaterials, other than a few for biomedical applications; many of the current technologies generically assesses the size range of materials. Dr. Wait asked what the methods are trying to accomplish (e.g., qualitative evaluation, quantitative issues). Mr. Phillips said that the goal could be somewhat qualitative or quantitative depending on the parameter being measured. It may be helpful to invite an expert to provide an overview presentation to the Board about nanotechnology and nano-measurements. Ms. Shields, Mr. Speis and Ms. Phelps noted the nanotechnology plenary presentation at a past National Environmental Monitoring Conference.

Ms. Phelps said that there are groups within the Agency that follow the nanotechnology research field, and an upcoming symposium will feature a keynote presentation about nano-sensors. The specific area within the nanotechnology field that the Board would like to hear about will determine the best person to invite to present. Ms. Wade asked whether there was anyone available to provide a general overview of the topic. Mr. Phillips said that he could inquire about an appropriate speaker via his contacts. Mr. Speis suggested that the Board focus on human health and environmental concerns for specific nanomaterials, which would lead into the analytical component. Dr. Wait agreed that an overview was needed before ELAB could recommend which methodologies or analytical approaches should be considered. Mr. Phillips noted that potential impacts and exposures are unknown because nanomaterials are extremely varied. Ms. Phelps is willing to help find Agency personnel to provide a presentation but cautioned that, because there is so much that is not known, it may be difficult to present about what the Board wants; currently, the topics are very research-oriented. Nanomaterials can be man-made, but they also occur naturally in the environment. The only regulations of which she was aware are related to nanosilver particles, but the Agency is investigating substances that need to be included on the toxicity list. EPA is focusing on research-based efforts before it can pursue regulatory actions.

Mr. Speis recommended that ELAB keep the topic of nanotechnology in mind but not pursue a specific action just yet because it does not appear that there currently is enough information to make recommendations to the Agency. Ms. Phelps agreed. Dr. Seiber was surprised at the number of products being introduced with nanotechnology components and thought that the topic was about to "explode." Ms. Phelps agreed, commenting the OW nanosilver regulation was enacted as a result of nanosilver-containing products. Mr. Phillips agreed that it is premature for the Board to act, but perhaps a general overview of the topic would be beneficial. Ms. Wade said that the Board would table the topic for now but keep it on ELAB's radar. Ms. Phelps said that she could reach out to the Agency nano-community about any issues that might be of interest to the Board.

Dr. Burrows was interested in an alternative method for polychlorinated biphenyls (PCBs), something "between" Method 608 and Method 1668 that would fill the gap (e.g., a GC triple quadruple method). In response to a question from Dr. Wait, Dr. Burrows explained that the

Method 608 methodologies were congener-specific methods. Dr. Burrows would like to see EPA further develop an available method. Mr. Phillips said that ALS Environmental, in the state of Washington, has an extremely sensitive method modified from Method 608. Grand Valley State University uses excessive cleanup and then negative chemistry ionization MS to separate congener peaks. He agreed that there are a number of available methods and wondered about the Agency's direction in terms of congeners or aroclor, as it is difficult to find a clean aroclor in the environment; he also noted the differences in manufacturing. Dr. Burrows thought that the majority of permits were aroclor-based. Dr. Pujari thought that congeners were more scientifically sound than aroclor; cost is another factor. Mr. Speis said that it was strongly recommended to Mr. Hanley at the ACIL meeting the day prior that analyzing wastewater samples for aroclor by Method 608 be discontinued in favor of congeners. In response to this recommendation, Mr. Hanley had indicated that EPA was moving in this direction, but it would be well into the future. Dr. Burrows said that ELAB could encourage Agency efforts in this direction.

Mr. Phillips moved that the Board examine alternative, more sensitive methods for PCB analysis. Mr. Speis seconded the motion. The following members volunteered to serve on the Task Group: Dr. Burrows, Mr. Phillips, Dr. Pujari (leader) and Mr. Speis.

Ms. Silky Labie did not have any new information about the Interagency Data Quality Task Force effort, as other issues have taken precedence. She will try to call a meeting of her group within the next month.

Dr. Wait reported that he had sent a simple note via email thanking EPA staff for meeting with his Task Group in January. One action item from that meeting was for the Task Group to develop a list of priority areas for method harmonization. The group met 2 days prior, and Dr. Wait would like to schedule a teleconference the following week to continue the discussion. Because OW is updating Method 1694, there is an opportunity to harmonize quality assurance/quality control across liquid chromatography-tandem MS methods. The terminology that supports all EPA methods could be harmonized, so the Task Group will examine some of the definitions. Ms. Phelps confirmed for Dr. Wait that the 2010 definitions were the latest. She suggested that ELAB write a letter of support for the definitions document to regenerate interest in standardizing terminology across the Agency. Dr. Wait noted that another topic that the Task Group discussed was recommending that EPA be more rigorous in approving methods for additional programs after they have been approved for one program (e.g., the recent cyanide method). The Task Group will continue to move forward on these issues.

Ms. Phelps will share information about Agency field sampling activities during the next teleconference. Ms. Wade noted that Mr. Jack Farrell also was not in attendance to present about TNI field sampling activities. Ms. Phelps states that field sampling competency policy information is available on the EPA website, and she will send the website link to the ELAB members. The EPA Deputy Administrator has required all field sampling groups within the Agency to comply with a set of 10 field operation guidelines, which are similar to an accreditation program/what TNI has created, no later than 2016; no exceptions will be made. She can share the guidelines document with the Board members. Mr. Phillips asked whether the field operation guidelines could be disseminated further than the Board members. Ms. Phelps said that it had been relatively widely distributed. The basic guidelines are being updated for clarity, but the original document is available for distribution.

4. NEW TOPICS/ISSUES FOR CONSIDERATION

Ms. Phelps reminded the Board members that applications for ELAB membership are being processed, and all of the current members should notify her whether they are interested in serving again or not. A *Federal Register* notice soliciting membership for the Board will be published soon. Those interested must contact her with their area of interest, which organization or stakeholder they are representing, and a current resume. Those requesting to represent a specific organization must include a letter of support from that organization. The membership process takes a great deal of time, and the package is due in May. Dr. Burrows asked whether those rotating off of the Board should notify potential replacements of the membership drive. Ms. Phelps said responded yes, noting that the goal is to assemble a balanced Board.

The Board did not introduce any new topics or issues for consideration.

5. WRAP-UP/REVIEW ACTION ITEMS

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

6. CLOSING REMARKS/ADJOURNMENT

The meeting was adjourned at 2:28 p.m.

Attachment A

AGENDA
ENVIRONMENTAL LABORATORY ADVISORY BOARD

Monthly Teleconference: 866-299-3188/9195415544#

March 19, 2014; 1:00 – 3:00 p.m. (EDT)

Opening Remarks	Phelps/Wade
Approval of February Minutes	Wade
Updates on Current Topics	All
Helium Issue	
Method Detection Limits	
Method Update Rule	
EPA Presentation by Mr. Adrian Hanley	
Interagency Data Quality Task Force/Data Quality Objectives Process	
Methods Harmony	
Field Sampling	
New Topics/Issues for Consideration	Wade
Wrap-Up/Review Action Items	Wade/LeBaron
Closing Remarks/Adjourn	Phelps/Wade

Attachment B**MEMBERSHIP LISTING AND GUESTS****ELAB TELECONFERENCE
March 19, 2014; 1:00 p.m. – 3:00 p.m. EDT**

Attendance (Y/N)	Name	Affiliation
N	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
N	Mr. John (Jack) E. Farrell, III	Analytical Excellence, Inc. Representing: The NELAC Institute (TNI)
Y	Ms. Ruth L. Forman	Environmental Standards, Inc. Representing: Large Third-Party Assessors
Y	Ms. Sylvia (Silky) S. Labie	Environmental Laboratory Consulting & Technology, LLC Representing: Third Party Assessors
Y	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)
Y	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
N	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. Mike Delaney (Guest)	Massachusetts Water Resources Authority
Y	Ms. Paula Hogg (Guest)	Hampton Roads Sanitation District

Attachment C

ACTION ITEMS

1. Ms. LeBaron will finalize the February 2014 meeting minutes and send them to Ms. Phelps via email.
2. Ms. Wade will send a follow-up letter to Mr. Walker about the MUR.
3. Mr. David Speis will send recently presented slides regarding the MUR to the Board members via email.
4. Dr. Burrows will draft a letter to EPA about the acrylonitrile method.
5. Ms. Phelps will reach out to the nano-community within the Agency to provide information to the Board.
6. Dr. Pujari (leader), Dr. Burrows, Mr. John Phillips and Mr. Speis will form a Task Group to examine alternative, more sensitive methods for PCB analysis; Dr. Pujari will schedule a Task Group meeting when he returns from his overseas trip.
7. Ms. Phelps will help Dr. Wait coordinate a Methods Harmonization Task Group meeting during the next 2 weeks.
8. Ms. Phelps will provide the Board members with the field operation guidelines document and the weblink to EPA's field sampling competency policy.
9. Board members will notify Ms. Phelps of their intent to serve or not serve another term on ELAB no later than April 4, 2014.

Attachment D

I hereby certify that this is the final version of the minutes for the Environmental Laboratory Advisory Board Meeting held on March 19, 2014.



Signature Chair

Ms. Patsy Root

Print Name Chair