

**SUMMARY OF THE  
ENVIRONMENTAL LABORATORY ADVISORY BOARD MEETING  
Monthly Teleconference Meeting: 866-299-3188/9195415544#  
April 19, 2017; 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 April 19, 2017. 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.

**ROLL CALL/INTRODUCTION**

Dr. Henry Leibovitz, Chair of ELAB, and Ms. Lara Phelps, Designated Federal Official (DFO) of ELAB welcomed participants and guests to the teleconference. Ms. Kristen LeBaron called the roll of the Board members and guests.

**APPROVAL OF PREVIOUS MINUTES**

Dr. Leibovitz asked for any comments about the March minutes; Dr. Mike Delaney asked that the minutes clarify that his comments were not made on behalf of ELAB. Dr. Mahesh Pujari moved to accept the March minutes; Dr. Brian Buckley seconded the motion. The Board members voted to approve the March 2017 minutes with the clarification and two abstentions.

**OPENING REMARKS AND UPDATES FROM THE DFO**

Ms. Phelps thinks that she should be able to publish documents on the ELAB website within the next few weeks. Once Ms. LeBaron finalizes the March minutes approved during this meeting, Dr. Leibovitz signs them, and Ms. Phelps is able to publish documents, the online minutes will be up to date through March 2017.

**TASK GROUP UPDATES ON CURRENT TOPICS**

***Interagency Data Quality Task Force (IDQTF)/Data Quality Objective (DQO) Process***

Dr. Leibovitz reported no new information on this task, which is on hold until Dr. Jordan Adelson (U.S. Navy) can convene a meeting of representatives from the Environmental Data Quality Workgroup and IDQTF to determine options to encourage earlier laboratory involvement in the DQO process.

***Methods Harmonization***

Dr. Leibovitz explained that the response letter to EPA regarding methods harmonization has been finalized and signed; he is preparing to mail it this week.

### ***In-Line and On-Line Monitoring***

Mr. Michael Flournoy reported that the Task Group met on April 4 to discuss the reformulation of the original request. The group determined that the most recent draft request must be revised again. Mr. Lem Walker (EPA) and Dr. Denice Shaw (EPA) will draft a new request and submit it to the Task Group by May 2. The Task Group then will be able to provide guidance to EPA.

### ***Selected Ion Monitoring (SIM)***

Dr. Leibovitz reported that the letter and recommendations to EPA regarding SIM has been finalized and signed; he is preparing to mail it this week.

### ***Whole Effluent Toxicity (WET) Testing***

In response to a question, Ms. LeBaron explained that the letter regarding WET testing had not been approved during ELAB's March meeting because the new members had requested to review the original white paper from The NELAC Institute's (TNI) WET Expert Committee that prompted the request to ELAB. Dr. Leibovitz sent the original white paper to the Board members on March 15.

Dr. Leibovitz summarized the Board's efforts, explaining that ELAB generally agreed with TNI's white paper about environmental laboratory testing consistency and following of procedures. The Board also agreed that the No Observed Effect Concentration values should be dropped, recommended a correction to the table, and suggested adding a glossary.

Dr. Keri Hornbuckle asked why the Board sends letters instead of presenting issues directly to EPA personnel. Dr. Leibovitz was unsure but noted that EPA has been thoughtful in responding to the Board's letters. When the FEM members think that a discussion between the Board and the Agency would be helpful, they are scheduled. Dr. Dallas Wait noted that this particular topic was discussed in depth at two face-to-face meetings at which EPA personnel were present and invited to provide comments. Therefore, the presentation of the issue and subsequent discussion occurred during the process.

Dr. Wait also highlighted the methods harmonization process, in which the Task Group requested and was granted a meeting with pertinent EPA staff. The meeting's discussion directed the Task Group's efforts for the following year. Ms. Phelps added that ELAB always is invited to discuss any issue directly with EPA. It is helpful that the Board send a letter first so that the Agency can ensure that it understands the issue and assembles the key personnel for the discussion. EPA will provide a response to every letter that ELAB sends. Dr. Leibovitz explained that every Task Group has the opportunity to involve EPA staff while addressing an issue, which often helps the Task Group to frame the ultimate letter to the Agency. A good example of this is the participation of Mr. Walker and Dr. Shaw in the Board's on-line and in-line monitoring effort.

Dr. Buckley asked about evidence that EPA takes actions on and implements the Board's recommendations. Ms. Phelps responded that many examples exist of how the Board has effected a great deal of change at the Agency (e.g., an improperly listed chemical identification in a method that EPA corrected immediately following ELAB's advice), and she attempts to

capture these actions in the Federal Advisory Committee Act database that she must maintain for ELAB. The Agency's response usually details its planned actions in response to ELAB's suggestions or explains why it cannot act on the recommendations. Dr. Leibovitz added that the Board has provided comments to EPA following *Federal Register* requests for comments, and the Agency has taken these comments into consideration. Ms. Phelps commented that more actions have resulted from the methods harmonization effort than the Board realizes, but the very different schedules of the offices responsible for the methods discussed in ELAB's recommendations will preclude a quick change. She described several additional examples of the effects ELAB has had on Agency actions.

Ms. Sharon Mertens noted that discussing the issues at face-to-face meetings is useful in that many stakeholders are represented and being educated by the Board's discussion. This is another area in which ELAB is having an effect.

Dr. Buckley moved to accept the letter on WET testing, and Ms. Mertens seconded the motion. The Board approved the motion with one abstention. Ms. LeBaron will format the letter and provide it to Dr. Leibovitz.

### *Cyanide Methodology*

Dr. Delaney explained that this topic had been discussed at previous face-to-face meetings, and he used EPA's input to help direct the effort. He provided comments on behalf of himself and his company on EPA's third 6-year review of drinking water standards and included with his comments a technical report comprising white papers he had written on the topic. The letter and report that Dr. Delaney provided to the Board members distills this information. He has received input from Ms. Deb Waller and Mr. Brad Meadows, neither of whom could be present for this teleconference. Mr. Meadows' concern related to reduced monitoring. Mr. Jeff Loewe also has submitted editorial comments. Dr. Delaney invited additional comments and asked that the Board consider it for voting during the May meeting.

In response to a question from Dr. Pujari, Dr. Delaney explained that the 200 parts per billion (ppb) is the EPA Maximum Contaminant Level, although the state of California uses a lower ppb.

Dr. Hornbuckle thought that the letter should be more clearly linked to the problem (i.e., how the reporting challenges affect the human health outcome and whether a misunderstanding could result in a hazardous situation). Dr. Delaney explained that cyanide differs from other drinking water contaminant in that its Maximum Contaminant Level Goal is not zero. Dr. Hornbuckle thought that the second paragraph needed an additional clarifying sentence because the last sentence did not provide this clarity; she was unsure how the first sentence led to the last sentence. Dr. Delaney agreed to examine the paragraph and rewrite it. Dr. Leibovitz read the letter as explaining that low levels of cyanide may be introduced in the sample preservation step and do not necessarily indicate that cyanide is present in the drinking water. Dr. Hornbuckle would like the consumer to understand how to interpret this information and did not think that the letter made it clear that the request is to raise the reporting limit. Dr. Delaney explained that the fifth recommendation in the attachment states this request, but he can add this information to the letter itself.

Dr. Hornbuckle requested to see the technical report; Dr. Delaney will provide the technical report to the members. Ms. Patty Carvajal suggested that the Board members review the letter and report and provide comments to Dr. Delaney by a specific date.

Dr. Delaney added that he would like to meet in person with Office of Water personnel, including Dan Hautman and Steve Wendelken, at the August face-to-face meeting. He noted that the state of California does not require that free cyanide results below 100 micrograms per liter be reported in Consumer Confidence Reports. His goal is for EPA to provide clarification to states, which then can adopt the requirement. He thinks that a good deal of confusion exists among the states. An ELAB member commented that states may choose to be protective beyond the original intent of the regulation.

The Board agreed to review the letter and report and provide any comments to Dr. Delaney by May 5. Dr. Delaney will incorporate the comments so that ELAB can discuss the letter during the May meeting.

### ***Drinking Water Certification Officer's Course***

Ms. Mertens will provide an update on this effort during the May meeting.

## **NEW TOPICS/ISSUES FOR CONSIDERATION**

### ***Gas Chromatography/Mass Spectrometry (GC/MS) Spectral Libraries***

Dr. Leibovitz explained that Ms. LeBaron had provided the Board members pertinent comments from the August 2016 and January 2017 ELAB face-to-face meetings regarding the GC/MS spectral libraries issue. He asked the Board members to consider whether ELAB should establish a Task Group to explore this issue.

Dr. Buckley explained that one reason to utilize a "homemade" library is that not all GC/MS instruments create the same fragmentation patterns for the same compounds. It is relatively easy to adapt and change the operating conditions of the GC/MS so that they more closely align with the National Institute of Standards and Technologies libraries. He was unsure whether the issue warranted the establishment of Task Group. Although he personally has had no problems, his work is not constrained by regulatory requirements. Dr. Kim Anderson agreed, noting her concerns about becoming prescriptive. Dr. Hornbuckle noted the differences among different methods (e.g., SW-846 vs. Clean Water Act). Dr. Leibovitz commented that these differences lead to different interpretations and provided several specific examples. If EPA would allow the use of different platforms, some of these could be clarified.

Mr. Flournoy commented that the American Council of Independent Laboratories (ACIL) has been working on this, and if ELAB forms a Task Group, it can work with ACIL. Dr. Leibovitz was unsure whether the Board could submit a joint recommendation to EPA. Mr. Flournoy noted that ACIL and ELAB could submit separate recommendations. Ms. Phelps explained that this would be acceptable, and both groups could mention any collaboration.

An ELAB member noted that inconsistencies will exist, and she was unsure whether the Task Group would examine what inconsistencies are allowable or whether inconsistencies should be

allowable at all. Dr. Leibovitz summarized that, first and foremost, in recognizing the differences between SW-846 and Resource Conservation and Recovery Act methods, the Board will highlight that Methods 624, 625 and 8270 were not written for time-of-flight MS. The real issue is whether instrument platforms should be included in allowable approaches to these methods or whether they should have their own methods (i.e., EPA could adopt methodologies for these platforms while recognizing their advantages). Quality Assurance Project Plans could include these types of parameters, as well. An ELAB member noted that some states are very prescriptive in their requirements, so any recommendations may not alleviate any issues.

Mr. Flournoy explained that the initial phase of a Task Group's work may be to gather information and develop a preliminary list of ideas, and the final phase will be to include it in the next Method Update Rule (MUR). Technology can be improved by the method if the method includes a technology piece and not an instrument-specific set of criteria. An ELAB member noted that the recommendation could be that methods should be written to be flexible and allow potential future technologies.

Dr. Anderson mentioned the Agency's previous focus on performance-based methods and wondered about its status. Ms. Phelps explained that in the late 1990s and early 2000s, the Agency took steps to move toward performance-based methods. The first attempt was to establish a "one size fits all" approach, which was not feasible. ELAB was vocal during this process. After this, EPA transformed its performance-based approach to "flexible approaches to environmental measurement," which outline four clear goals. The Agency held a webinar series in 2012 to provide updates about these flexible approaches. A second webinar series is kicking off on April 25 to provide another update about EPA's activities and accomplishments in this area; each webinar is designed to be 1.5 hours in length, which will include 30 minutes for audience discussion. The goal is to publicize the Agency's activities and accomplishments. If ELAB is interested, EPA can provide the webinar to the Board, or Board members can attend the webinars in the series. Ms. LeBaron will be attending the webinars and distilling the resulting discussions so that the Agency can publicly provide all of the feedback from the discussions and take action on developing follow-up tools to address the feedback. The ultimate goal is to institutionalize these approaches.

Ms. Phelps will send the list of flexible approaches webinar dates to the ELAB members. She also will try to record a webinar for the Board members to view. The last webinar will be presented at the August 2017 National Environmental Measurement Conference the day after the Board's face-to-face meeting. The goal will be for the Board members to attend a webinar prior to ELAB's June meeting and invite the presenters to the June meeting to facilitate discussion.

The Board agreed to discuss this issue during the May meeting when Dr. Pujari is able to be present for the full discussion and potentially frame the discussion around the flexible approaches update.

#### ***Additional Topics/Issues for Consideration***

In response to a question, Dr. Leibovitz explained that the last update he had heard about the MUR is that it had been approved in December 2016, but its implementation has been delayed

by the new administration. Information about how long it will be delayed is not available, even from Mr. Walker.

Mr. Loewe commented that some contract laboratories had sent marketing notification that states that the recent revision to the MUR now allows reduced sample sizes for specific contaminants. He asked whether any of the Board ELAB members could confirm that the volume requirements have changed or whether the rule had been misinterpreted. Dr. Leibovitz wondered whether it was related to the volumes for medium-level analysis. Mr. Elan Rieser commented that, as far as oil and grease are concerned, Method 1664 itself allows for smaller volumes to be collected.

***Wrap-Up/Summary of Action Items***

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

**CLOSING REMARKS/ADJOURNMENT**

Dr. Hornbuckle moved to adjourn the meeting; Mr. Rieser seconded the motion. The Board unanimously approved the motion to adjourn the meeting at 2:54 p.m.

Attachment A

**AGENDA**  
**ENVIRONMENTAL LABORATORY ADVISORY BOARD**  
**Monthly Teleconference Meeting: 866-299-3188/9195415544#**  
**April 19, 2017; 1:00 – 3:00 p.m. EDT**

|   |                   |
|---|-------------------|
| Call to Order/Roll Call/Introduction of Guests  | Leibovitz/LeBaron |
| Approval of Prior Minutes   | Leibovitz         |
| Opening Remarks and Updates From the DFO  | Phelps            |
| Updates on Current Topics   |                   |
| Interagency Data Quality Task Force/Data Quality Objective Process: Leibovitz   |                   |
| Methods Harmonization: Leibovitz  |                   |
| In-Line and On-Line Monitoring: Flournoy  |                   |
| Selected Ion Monitoring: Leibovitz  |                   |
| Whole Effluent Toxicity Testing: Leibovitz  |                   |
| Cyanide Methodology: Delaney  |                   |
| Drinking Water Certification Officer's Course: Mertens  |                   |
| New Topics/Issues for Consideration   | Leibovitz         |
| Gas Chromatography/Mass Spectrometry (GC/MS) Spectral Libraries   |                   |
| Continue discussion on request to ELAB to address existing inconsistencies across EPA methods (624, 625, 8270) regarding the requirements for GC/MS spectral library sources. |                   |
| Wrap-Up/Summary of Action Items   | Leibovitz/LeBaron |
| Closing Remarks/Adjournment   | Phelps/Leibovitz  |

**Attachment B**

**PARTICIPANTS LIST**  
Board Members

| <b>Attendance<br/>(Y/N)</b> | <b>Name</b>                                | <b>Affiliation</b>   |
|-----------------------------|--|--|
| Y                           | Dr. Henry Leibovitz (Chair)                | Rhode Island State Health Laboratories<br>Representing: Association of Public Health<br>Laboratories                 |
| Y                           | Dr. Michael (Mike) Delaney<br>(Vice-Chair) | Massachusetts Water Resources Authority (MWRA)<br>Representing: MWRA   |
| Y                           | Ms. Lara Phelps (DFO)                      | U.S. Environmental Protection Agency<br>Representing: EPA  |
| Y                           | Dr. Kim Anderson                           | Oregon State University<br>Representing: Academia—Oregon State University  |
| N                           | Ms. Ann Bailey                             | EcoChem, Inc.<br>Representing: EcoChem, Inc.   |
| Y                           | Dr. Brian Buckley                          | Rutgers Environmental and Occupational Health<br>Sciences Institute<br>Representing: Academia and Laboratory—Rutgers |
| Y                           | Ms. Patricia (Patty) Carvajal              | San Antonio River Authority<br>Representing: Watershed/Restoration   |
| Y                           | Mr. Michael Flournoy                       | Eurofins Environment Testing USA<br>Representing: American Council of Independent<br>Laboratories                    |
| Y                           | Dr. Keri Hornbuckle                        | The University of Iowa<br>Representing: Academia—The University of Iowa  |
| N                           | Dr. Deyuan (Kitty) Kong                    | Chevron Energy Technology Company<br>Representing: Chevron   |
| Y                           | Mr. Jeff Loewe                             | NiSource, Inc.<br>Representing: Industry—NiSource, Inc.  |
| N                           | Mr. Brad Meadows                           | BSK Associates<br>Representing: Commercial Laboratory—Babcock<br>Laboratories, Inc.                                  |
| Y                           | Ms. Sharon Mertens                         | Milwaukee Metropolitan Sewerage District<br>Representing: The NELAC Institute  |
| Y                           | Dr. Mahesh Pujari                          | City of Los Angeles<br>Representing: National Association of Clean Water<br>Agencies                                 |
| Y                           | Mr. Elan Rieser                            | Con Edison<br>Representing: Utility Water Act Group  |
| Y                           | Dr. A. Dallas Wait                         | Gradient<br>Representing: Consumer Products Industry   |
| N                           | Ms. Debra (Deb) Waller                     | New Jersey Department of Environmental Protection<br>(NJDEP)<br>Representing: State Government—NJDEP                 |



**PARTICIPANTS LIST (CONT.)**  
**Contractors and Guests**

| <b>Attendance<br/>(Y/N)</b> | <b>Name</b>                      | <b>Affiliation</b>                          |
|-----------------------------|----------------------------------|---|
| Y                           | Ms. Kristen LeBaron (Contractor) | The Scientific Consulting Group, Inc. (SCG) |
| Y                           | Mr. Joe Lapceovich (Guest)       | First Energy                                |

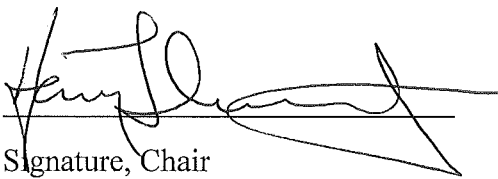
## Attachment C

### ACTION ITEMS

1. Ms. LeBaron will finalize the March meeting minutes and send them via email to Ms. Phelps.
2. Ms. LeBaron will format the WET testing letter and provide it to Dr. Leibovitz.
3. The Board members will review the cyanide letter and technical report that Dr. Delaney will provide and send their comments to Dr. Delaney by May 5. Dr. Delaney will incorporate the comments so that ELAB can discuss the letter during the May meeting.
4. Ms. Phelps will send the list of flexible approaches webinar dates to the ELAB members.
5. Dr. Leibovitz will update May's agenda to include the GC/MS discussion in relation to the flexible approaches update.
6. *Outstanding action item from November 2016:* The Board will determine whether it will form a Task Group to review the Independent Laboratories Institute's document regarding the addition of microwave and interference-resolving technologies to Method 200.8.

**Attachment D**

I hereby certify that this is the final version of the minutes for the Environmental Laboratory Advisory Board Meeting held on April 19, 2017.



Signature, Chair

Dr. Henry Leibovitz

Print Name, Chair