SUMMARY OF THE
ENVIRONMENTAL LABORATORY ADVISORY BOARD MEETING
Face-to-Face Meeting/Teleconference: 866-299-3188/9195415544#
Hyatt Regency Crystal City at Reagan National Airport, Crystal City, VA
February 2, 2015; 1:00 – 3:00 p.m. EST

The U.S. Environmental Protection Agency's (EPA) Environmental Laboratory Advisory Board (ELAB or Board) face-to-face meeting was held on February 2, 2015, from 1:00 to 3:00 p.m. EST. The meeting was held as a session at the Forum on Laboratory Accreditation. The agenda for this meeting is provided as Attachment A, a list of meeting participants is provided as Attachment B, and action items are included as Attachment C. The official signature of the Chair or Vice-Chair is included as Attachment D.

AGENDA ITEMS:

1. OPENING REMARKS AND ROLL CALL

Ms. Lara Phelps, Designated Federal Officer (DFO) for the Board, and Ms. Patsy Root, Chair of ELAB, welcomed the members and guests to the meeting. Following an overview of the agenda by Ms. Root, the Board members introduced themselves. Ms. Root explained that the Board operates under the Federal Advisory Committee Act (FACA). ELAB's mission is to provide consensus advice, information and recommendations on issues related to enhancing EPA's measurement programs and facilitating the operation and expansion of a national environmental accreditation program. ELAB provides this advice, information and/or recommendations to the EPA Administrator, EPA Science Advisor and/or Forum on Environmental Measurements (FEM).

2. APPROVAL OF JANUARY MINUTES

Ms. Root asked whether there were any comments regarding the January Board meeting minutes other than the attribution correction submitted by Dr. Henry Leibovitz via email; there were none. Dr. Leibovitz moved to approve the minutes as edited. The meeting minutes for January were approved unanimously with the attribution edit.

3. ELAB CHARTER/HIGHLIGHTS OF ACTIVITIES SINCE AUGUST 2014

Ms. Root described the highlights of the Board's accomplishments since the last face-to-face meeting, which included sending three separate letters to EPA regarding: (1) method detection limits (MDLs), (2) Board engagement during the development of the next Method Update Rule (MUR), and (3) opportunities to harmonize methods within the Agency.

4. UPDATES FROM THE DFO

Ms. Phelps explained that the ELAB website has been updated with the latest information and recent meeting minutes, and a process has been implemented that will allow the website to be updated monthly. She will publish the face-to-face meeting PowerPoint slides by the end of the week.

The FEM discussed methods harmonization during its quarterly meeting the prior week. The FEM appreciates the Board's letter on the topic and the opportunity to explore the issues through a workgroup. A great deal of work is being done in this area within the Agency, but these efforts are not as transparent as possible. Various EPA offices discuss harmonization routinely and have been taking advantage of opportunities to harmonize methods (e.g., microbiology) across programs. For example, the Office of Water (OW) and Office of Solid Waste and Emergency Response (OSWER) collaborate very well in this area. Regulatory barriers, however, inhibit some harmonization efforts. The Agency has created tools, including policies and guidelines, that could increase methods harmonization and inconsistencies; these will be promoted more effectively in the future. EPA appreciates the input from the Board and others regarding methods harmonization and will continue its efforts to make its efforts transparent. The Agency looks forward to ELAB providing recommendations for specific methods that can be harmonized.
In response to a question from Ms. Root, Ms. Phelps explained that the policies and guidelines are available on the EPA website.

Ms. Phelps said that the Agency is interested in the topic of selective ion monitoring. The FEM has not met since ELAB sent its letter on the subject, but a formal response to the Board will be forthcoming.

Another topic of interest to ELAB is a recent Agency decision that the FEM be more proactive. As a result, the FEM has entered into a consultation process with the Science Advisory Board about the current and future status of measurement, monitoring and technology within the Agency. The FEM has identified pertinent questions about the issue and developed a framework for the conversation. The next step is to develop a 50-page report, including a history of measurement, monitoring and technology within EPA programs, regions and the FEM.
Ms. Phelps currently is interviewing a number of EPA personnel to develop the report, which is the first of its kind within the Agency.

5. TASK GROUP UPDATES

Ms. Root stated that the Board possesses broad expertise and works on a variety of topics identified by ELAB members, the Agency or the environmental laboratory community. The Board addresses these topics through temporary Task Groups. The Task Group leaders or their representatives provided a report of current topics/activities.

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

Dr. Leibovitz explained that the Task Group has changed membership since this issue originally was introduced. EPA and the U.S. Departments of Defense and Energy established the IDQTF, which has developed guidelines regarding the DQO process. The Board would like to increase laboratory involvement in the DQO and Quality Assurance Project Plan (QAPP) development

process. There is concern within the environmental laboratory community that laboratories have not been sufficiently involved in the process, resulting in DQOs that are not achievable and/or reasonable. The IDQTF has recommended that data generators/experts be included in the process. Members of the ELAB Task Group would like to meet with IDQTF representatives to discuss the task force's guidance, with the goal of increasing understanding and determining the specific reasons that laboratories are not being included in the DQO and QAPP development process. The Task Group will explore which additional actions can be taken at the project level to increase laboratory involvement. A letter of introduction was sent by the Board to the IDQTF in July 2014.

Ms. Phelps explained that there has been some movement within the Agency, which has affected the response to ELAB's letter. Although no longer officially affiliated with the IDQTF, Mr. Jim Woolford (EPA) and a staff member have remained involved with the effort and are willing to discuss this issue with the Task Group. In response to a question by Ms. Root, Ms. Phelps explained that the IDQTF finished its task and developed a product; how the IDQTF's efforts have been implemented is unclear.

Methods Harmony

Ms. Michelle Wade explained that the Task Group had met with the Agency via teleconference and in person to discuss methods harmonization. EPA invited the Board to provide recommendations regarding specific methods that may be amenable to harmonization. Previously, the Board provided recommendations regarding Methods 608, 624 and 625 and the SW-846 Update V; the Task Group will review these to avoid duplicating efforts. The Task Group currently is considering Method 1694 and herbicide, ion chromatography, total organic carbon, fluoride and metals methods. Ms. Wade showed a sample table highlighting EPA methods comparisons that the Task Group is using as a template for its efforts. Ms. Root agreed that it is important to keep the previous recommendations in mind when developing future recommendations. This is an important effort, and the end results will be appreciated by the environmental laboratory community.

Acrolein and Acrylonitrile Methods

Ms. Phelps explained that Dr. Mahesh Pujari, who was unable to attend the meeting, leads this Task Group. OW is very interested in this topic, and Dr. Pujari remains in contact with the office. A document allowing more information to be shared on this subject will be signed on Wednesday, February 4, 2015, which will allow more information to be shared on this subject. Dr. Pujari will be able to provide an update during the Board's March meeting.

Polychlorinated Biphenyls (PCBs)

Dr. Leibovitz explained that Dr. Pujari has been discussing this effort with OW personnel. The goal is to create a more straightforward method to allow laboratories to report PCB congeners in addition to aroclors in a manner similar to Method 8082 rather than Method 1668C, which has complicated cleanup and analysis. A modification of Method 608 is being explored that would allow the analysis of PCB congeners with mass spectrometry and more straightforward cleanup procedures.

MUR

Ms. Root explained that ELAB had formally requested EPA engagement on MUR development and participated in a constructive face-to-face meeting with Agency personnel in August 2014. The Board already had provided feedback and proposed changes to several EPA methods that will be included in the forthcoming MUR. The Agency also had encouraged the Board to provide positive/constructive feedback once the MUR is published for public comment, most likely by the end of February 2015. EPA has agreed to work with the Board on subsequent MURs to better leverage the Board's experience and expertise with various methods.

In-Line/On-Line Monitoring

Dr. Kitty Kong explained that this effort is new, and the Board has been asked to evaluate a proper procedure to ensure accuracy for in-line and on-line monitors. The Task Group plans to research applicable methods and user manuals to ultimately allow ELAB to recommend performance standards for in-line and on-line monitors; critical elements that should be considered by a standards development organization for in-line and on-line monitors also will be explored. The Task Group will begin work soon and hopes to provide information to the full Board by July 2015 so that it can provide an update to the environmental laboratory community at the August face-to-face meeting. Ms. Root added that facility operators and regulators have discussed properly implementing and regulating, respectively, in-line and on-line monitoring programs and equipment. It is interesting to note that both sides have approached the Board with this issue.

Qualification of Drinking Water Data

Ms. Patty Carvajal explained that the American Council of Independent Laboratories (ACIL) and Pennsylvania Association of Accredited Environmental Laboratories (PaAAEL) brought to ELAB concerns about the implementation of a policy that prohibits the reporting of qualified drinking water data into the Pennsylvania Department of Environmental Protection's (PaDEP) Drinking Water Electronic Lab Reporting database, essentially requiring that all drinking water data be qualification free. The Task Group has been gathering information and examples since the Board received the request.

Since the Task Group began gathering information, the PaDEP has implemented a process for requests to report qualified drinking water sample results, including specific examples for situations in which data cannot be reported, such as unacceptable initial calibration, analysis or preparation performed outside of regulated hold time or inappropriate sample container(s). If the laboratory experiences matrix spike failures—assuming acceptable results for all other quality control (QC) measures—for inorganic testing, the laboratory must re-prepare the matrix spike sample and analyze the re-prepared sample. If the second analysis indicates matrix interference, then the laboratory may submit the request form. For organic testing, the laboratory must verify that any surrogates and/or internal standards are within method acceptance criteria for the particular sample and matrix spike. If the surrogates, internal standards and all other sample acceptance criteria are acceptable, then the laboratory may submit the request form. As a next step, the Task Group will convene to draft a response to the ACIL and PaAAEL regarding the process to request submitting qualified data to the PaDEP.

6. OPEN DISCUSSION/NEW ITEMS

Mr. Dave Speis (QC Laboratories, Inc.) noted that, although it arose in Pennsylvania, qualification of data is not a state-specific issue and appears to be under the direction of EPA Region 3 or the Office of and Ground Water and Drinking Water in Cincinnati, Ohio. The concern is national if this is a trend, and the focus should be on guidance given by EPA. Ms. Root responded that the Board understands that this issue goes beyond Pennsylvania, but the effort is in its infancy, and the Task Group still is gathering information.

Mr. Dan Hautman (EPA) explained that allowing data to be reported as qualified is a dangerous course relative to critical public health concerns. Pennsylvania's effort in qualifying data identifies different aspects of the data that can be used to verify that the information is valid. His concern is that data will be reported in situations in which re-collections should be made. If this is allowed, the concept of ensuring the highest quality data collapses; a balance must be struck. The matrix data spike method mentioned in the Pennsylvania guidance is done in EPA's Unregulated Contaminant Monitoring Rule program, with the requirement that the data be submitted to EPA for examination. The drinking water program is stringent regarding data quality.

Ms. Silky Labie said that, in terms of the holding time issue, if the values are well above the maximum contamination level, then it can be determined that a problem needs to be addressed. Mr. Hautman agreed that in cases in which there is an observation of high levels and the holding time fails the criteria, it does not mean that another collection must be taken to obtain another valid data set; the information is not discounted completely. Pennsylvania's approach is to determine explicitly which corrective actions have been undertaken to address these situations. Enforcement action requires a solid case; the legal defensibility in addition to the absolute quality of the data is important.

Mr. Speis is concerned that some of the requirements state that a matrix spike failure is cause for re-collection. His second concern is that regulations and rules are being used to change things that methods or science cannot address. It is necessary to avoid making these types of decisions and implementing regulations when a method is inherently incapable of providing the type of data that a regulatory office would like to see consistently. Ms. Root noted that QC is included in methods, including how to produce defensible data. What is missing? Mr. Hautman responded that criteria are listed, but a scientific rationale can be used to make decisions about what the data indicate about the presence or nonpresence of something measurable. Many accreditation bodies will not audit to a standard if it is not in the regulations.

Ms. Stacie Metzler (Hampton Roads Sanitation District) said that the one term that she had not heard in this discussion is "usability." There is a line between what a laboratory does and what a data user does. Laboratories validate data to the methods, standard operating procedures and accreditation standards. If any of these fail, the laboratory flags the data. Data users must determine whether the flagged data meet their objectives. It is a conflict of interest to not allow laboratories to submit flagged data.

Ms. Nan Thomey (Environmental Chemistry, Inc.) said that the goal is to generate data of known quality. Data qualification is part of this process so that the data user does not use the data

inappropriately. Codified rules regarding qualified data require laboratories to be perfect when the prescribed methods are not perfect. It is necessary to keep unintended negative consequences in mind. Additionally, certain situations do not allow for resampling. When determining whether or not to accept qualified data, many issues need to be taken into consideration; it is not a "one size fits all" concept.

Mr. Bob Wyeth (Independent Consultant) did not think that there was an issue regarding how drinking water data are used; the current practice implies to decision-makers that data submitted by laboratories are far better than they actually are. Currently, laboratories submit data that are not qualified but should be. These situations cause EPA or communities to become more liable if an enforcement issue arises. Not allowing laboratories to submit qualified data creates an untenable situation that must be addressed, although he agreed with Mr. Hautman that it can lead to a dangerous course. At a minimum, regulators must know the status of a laboratory's performance.

Mr. Greg Pronger (Suburban Laboratories, Inc.) commented that regulators must choose which entity should serve as the "policeman." If a laboratory cannot report qualified data, regulators are placing the onus on the laboratory to be its own policeman. The reverse issue is whether the data receivers are able to understand the significance of the data qualification if laboratories release qualified data. Resampling should not be considered a significant issue. In terms of hold times, where does the line get drawn?

Mr. Speis said that the discussion is about usable data that have minor flaws that do not affect the usability of the information, at which point it is not an analytical issue but a data usability (understanding) issue. How do you report the data so that the user understands how to apply the data? In making it an analytical issue, laboratories are required to be perfect every time. Failure to report a qualification cannot be a function of the inability of a database to handle it.

Mr. Hautman agreed that perfection every time is not possible, but perfection most of the time is expected and achievable. If laboratories cannot meet established criteria most of the time, there is a problem. How much can be known about data quality with recurring QC failures? Data of known quality are based on established criteria and standards. Another issue is that states have primacy and can choose to be more stringent than the federal government. If different states take different approaches, it limits EPA's ability to assist laboratories and hampers national uniformity. Pennsylvania essentially is encouraging a system in which laboratories that routinely ask for waivers will be scrutinized, which in turn could discourage laboratories from reporting flagged data.

Mr. Speis noted that treating all cases in the same manner (i.e., "painting everything with the same brush") results in good data that could have been used to make decisions being discarded, which wastes money.

Ms. Thomey noted that recurring issues are a different aspect of the problem, particularly if the recurrences come from the same laboratories. She is referring to the fact that every laboratory will encounter occasional situations in which data must be qualified. This does not mean that these laboratories are incompetent; it means that they are doing what they are supposed to be doing. Mr. Wyeth wondered why laboratories that have recurring problems still are accredited.

In response to a question from Ms. Root, Dr. Kong clarified that the Task Group's focus will be national rather than regional. Ms. Aurora Shields said that an outstanding question was in regard to the most appropriate person at EPA to contact about this matter.

Dr. Leibovitz noted that there is a question regarding qualified estimated data that are below reporting limits but above federally required detection limits. Dr. Kong said that she would need to review the information to determine whether estimated data are included in this issue. Dr. Leibovitz's concern is that public water systems will never get off monitoring unless they can demonstrate that the water is clean down to the detection limits for certain compounds. Ms. Root commented that the first step is to identify the most appropriate EPA personnel and what data are being qualified.

Ms. Phelps noted that Ms. Marlene Moore (Advanced Systems, Inc.) had emailed her during the discussion and connected her with Dr. Jordan Alderson (Department of Defense). Dr. Alderson already has provided Ms. Phelps with the list of current IDQTF members; the current EPA members are not among those whom the Board has contacted. Ms. Phelps will share this updated information with the Board.

My. Wyeth asked whether it was possible and/or advantageous for FACA committees to provide input prior to the publication of the MUR in the *Federal Register*. Ms. Phelps said that any FACA committee has the ability to provide advice regarding any ongoing activity, whether it has been published or not. ELAB had, via letter, offered to review the MUR prior to publication if EPA was willing to provide the MUR to the Board. Ms. Root added that EPA has indicated that it will consult ELAB on relevant issues prior to publication in the future. Mr. Wyeth said that this early input would facilitate easier implementation.

Mr. Wyeth approves of increasing laboratory involvement in the DQO process, but "the devil is in the detail." There are examples of various laboratories that could provide excellent usable data but have different acceptance criteria. How will ELAB approach laboratory involvement? Will it be based on certain minimum criteria? Is this question premature? Dr. Leibovitz thought that the question was a bit premature and explained that the first step will be to determine whether the existing guidance ensures laboratory involvement in actual practice. The Task Group will discuss with the IDQTF what pieces may be missing to ensure this involvement. Minimum requirements and criteria should be outlined in the QAPP. It may not be ELAB's role to determine these requirements. Dr. Leibovitz agreed with Mr. Wyeth that different laboratories will have different criteria. Mr. Wyeth said that this presented an opportunity to engage trade organizations to obtain a consensus of many different laboratories across the community.

Ms. Moore stated that she is glad to help with the Board's IDQTF efforts. The IDQTF program ensures that the laboratory is brought into the process at the beginning stage, rather than the end, by training the data users to consider data quality issues before data are generated. She recommended that participants read the *Uniform Federal Policy for Quality Assurance Project Plans (UFP-QAPP Manual): Evaluating, Assessing, and Documenting Environmental Data*

Collection and Use Programs[1], a culmination of all guidance available in 2005. Additionally, new advisories and updates are released continuously.

Mr. Wyeth applauded the Board's harmonization efforts and asked which offices ELAB had met with. Ms. Phelps explained that OW and OSWER had been present at the face-to-face meeting; the meeting with the FEM had included the Offices of Air and Pesticide Programs. Mr. Wyeth asked whether there had been discussion about harmonization among Methods 624, 625, 8260 and 8270; his concern is about the usefulness of this effort to working laboratories. Ms. Wade explained that the Board previously made recommendations to EPA regarding these methods, and the Task Group currently is examining those recommendations to ensure that it does not duplicate previous ELAB efforts. She personally has examined methods important to municipal laboratories, which is how metals methods were identified; commercial laboratories are not being excluded.

Dr. Carl Kircher (Florida Department of Environmental Protection) said that, in terms of methods harmonization, The NELAC Institute will change Volume 1, Module 4 to include updates regarding MDLs, limit of detection and limit of quantitation (LOQ). EPA also is modifying 40 CFR 136, Appendix B regarding the MDL procedure. Some promulgated drinking water methods specify that MDL limits must be done according to 40 CFR 136, Appendix B. How will the Board harmonize all of this? Ms. Root responded that the Board realizes that it cannot do and be everything in terms of harmonizing methods among programs, but ELAB can focus on particular areas that are significant to the laboratory community (e.g., QC, retention times). Ms. Carvajal noted that ELAB's methods harmonization efforts will be an ongoing process. Ms. Wade agreed, noting that the Board and the Agency have developed a very productive relationship to communicate about harmonization issues, and EPA is receptive to ELAB's input in this area. ELAB can recommend opportunities for harmonization but cannot implement harmonization within the Agency. She reiterated that this will be an ongoing Board effort.

Dr. Leibovitz commented about the recent *Federal Register* announcement regarding the SW-846 moving from 40 CFR Part 136, Appendix B MDL studies toward the LOQ. There was a recommendation that the Clean Water Act program consider the same move. This is a program issue in addition to being a laboratory issue. Moving to the LOQ will affect the federal detection limits, which are included in many programs. LOQs have a good chance of not being low enough to satisfy federal detection limits; therefore, it may present a quandary that regulatory programs will need to address. This issue goes beyond methods harmonization to regulatory requirements.

Mr. Pronger highlighted the differences between the MDL and LOQ and asked for comments about this. Dr. Leibovitz agreed with Mr. Pronger's point and explained that some of the regulatory limits would need to be increased by a factor of three to obtain a usable number. Ms. Phelps commented that this has been in embedded in the regulations for a long time, and given budget and other constraints, the Agency cannot achieve consistency regarding all aspects of MDLs across all media. The Agency has developed glossaries and other tools, which are available on the FEM's website, with internal agreement that these tools were the best manner to

[1] Available at http://www2.epa.gov/sites/production/files/documents/ufp_qapp_v1_0305.pdf

address this topic with the available resources and inability to "undo the past." Ms. Thomey agreed and asked the Board to consider the burdens on laboratories with multiple instruments, reporting issues and programming areas.

This is Ms. Root's last face-to-face meeting as the ELAB Chair, and she stated that it has been wonderful serving as Chair with the professionals who make up the Board. She congratulated Ms. Carvajal, who will begin her term as Chair the following month. Ms. Phelps thanked Ms. Root for serving as Chair for 2 years instead of the customary 1-year term. She noted that the ELAB members should think about whom they would like to nominate as the next Vice-Chair via the email process that she will commence prior to the March meeting.

7. REVIEW ACTION ITEMS/CLOSING REMARKS/ADJOURNMENT

Ms. Jenny Lee (The Scientific Consulting Group, Inc.) reviewed the action items identified during the meeting, which can be found in Attachment C.

Citing no additional comments or issues, Ms. Root asked for a motion to adjourn. Ms. Wade made the motion, which Dr. Kong seconded. The meeting was adjourned at 2:54 p.m.

Attachment A

AGENDA
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Face-to-Face Meeting/Teleconference: 866-299-3188/9195415544#
Hyatt Regency Crystal City at Reagan National Airport, Crystal City, VA
February 2, 2015; 1:00 – 3:00 p.m. EST

1:00 – 3:00 p.m.	Opening Remarks and Roll Call
	Approval of January Minutes
	ELAB Charter/Highlights of Activities Since August 2014
	Updates From the Designated Federal Officer
	Task Group Updates
	Open Discussion/New Items
	Review Action Items/Closing Remarks/Adjournment

Attachment B

MEMBERSHIP LISTING AND GUESTS

ELAB MEETING
February 2, 2015; 1:00 – 3:00 p.m. EST

Attendance (Y/N)	Name	Affiliation
Y	Ms. Patsy Root (Chair)	IDEXX Laboratories, Inc. Representing: Laboratory Product Developers
Y	Ms. Patricia (Patty) M. Carvajal (Vice-Chair)	San Antonio River Authority Representing: Watershed/Restoration
Y	Ms. Lara P. Phelps, DFO	U.S. Environmental Protection Agency Representing: EPA
N	Dr. Charles (Charlie) Carter	TestAmerica, Inc. Representing: TestAmerica, Inc.
Y (via teleconference)	Dr. Michael (Mike) Delaney	Massachusetts Water Resources Authority Representing: Massachusetts Water Resources Authority
Y (via teleconference)	Mr. Michael Flournoy	Eurofins Environment Testing USA Representing: American Council of Independent Laboratories
Y	Mr. Keith Greenaway	ANSI-ASQ National Accreditation Board Representing: The NELAC Institute
Y	Dr. Deyuan (Kitty) Kong	Chevron Energy Technology Company Representing: Chevron
Y	Ms. Sylvia (Silky) S. Labie	Environmental Laboratory Consulting & Technology, LLC Representing: Third-Party Assessors
Y (via teleconference)	Dr. Henry Leibovitz	Rhode Island State Health Laboratories Representing: Association of Public Health Laboratories
N	Dr. Mahesh P. Pujari	City of Los Angeles Representing: National Association of Clean Water Agencies
N	Dr. James N. Seiber	University of California, Davis Representing: Academic and Research Communities
Y (via teleconference)	Ms. Aurora Shields	City of Lawrence, Kansas Representing: Wastewater Laboratories
Y	Ms. Michelle L. Wade	Kansas Department of Health and the Environment Representing: Laboratory Accreditation Bodies
N	Dr. A. Dallas Wait	Gradient Corporation Representing: Consumer Products Industry

Attendance (Y/N)	Name	Affiliation
Y (via teleconference)	Ms. Kristen LeBaron (Contractor)	The Scientific Consulting Group, Inc. (SCG)
Y	Ms. Jenny Lee (Contractor)	SCG
Y (via teleconference)	Ms. Rachel McIntosh-Kastrinsky (EPA ASPPH Fellow)	EPA
Y	Mr. Dan Hautman (Guest)	EPA
Y	Dr. Carl Kircher (Guest)	Florida Department of Environmental Protection
Y	Ms. Stacie Metzler (Guest)	Hampton Roads Sanitation District
Y	Ms. Marlene Moore (Guest)	Advanced Systems, Inc.
Y	Mr. Greg Pronger (Guest)	Suburban Laboratories, Inc.
Y (via teleconference)	Ms. Mary Robinson (Guest)	Indiana State Department of Public Health
Y (via teleconference)	Ms. Penny Shamblin (Guest)	Hunton & Williams, LLP
Y	Mr. Dave Speis (Guest)	QC Laboratories, Inc.
Y	Ms. Nan Thomey (Guest)	Environmental Chemistry, Inc.
Y	Mr. Bob Wyeth (Guest)	Independent Consultant

Attachment C

ACTION ITEMS

1. Ms. Kristen LeBaron will finalize the January 2015 teleconference minutes and send them via email to Ms. Phelps.

2. Ms. Phelps will ensure that the PowerPoint slides from the meeting are posted on the ELAB website by the end of the week.

3. Ms. Phelps will email the new information about the IDQTF to the Board members.

4. Board members should consider whom they would like to nominate for Vice-Chair; Ms. Phelps will initiate the nomination/voting process prior to ELAB's March meeting.

Attachment D

I hereby certify that this is the final version of minutes for the Environmental Laboratory Advisory Board Meeting held on February 2, 2015.

Signature Chair

Ms. Patricia Carvajal

Print Name Chair