

**SUMMARY OF THE
ENVIRONMENTAL LABORATORY ADVISORY BOARD MEETING
Teleconference: 866-299-3188/9195415544#
March 17, 2010; 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 17, 2010, from 1:00 to 3:00 p.m. EDT. The agenda for this meeting is provided as Attachment A, a list of meeting 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/ROLL CALL OF ELAB MEMBERS AND IDENTIFICATION OF GUESTS

Ms. Lara Autry, Designated Federal Officer (DFO) for ELAB, welcomed participants to the teleconference, and Mr. Dave Speis, Chair of the ELAB, called an official roll of the Board members and guests. Ms. Autry asked to move the DFO updates to the beginning of the teleconference so that she could share information regarding EPA discussions that could help in the Board's exploration of new issues.

2. REVIEW/APPROVAL OF FEBRUARY MINUTES

Mr. Speis asked whether there were any changes or comments to the February 2010 teleconference minutes. Dr. Michael Wichman noted that the Association of Public Health Laboratories (APHL) letter was sent to Ms. Lisa Heinzerling (EPA) and not the White House as stated on page 4.

Ms. Judy Morgan made a motion to approve the February minutes with this change; Mr. Gary Dechant seconded the motion. The meeting minutes for February were approved unanimously with the above change and no additional discussion.

3. NEWS/UPDATES FROM THE DFO

Ms. Autry explained that there have been many recent comments by the EPA administration regarding the direction the Agency is taking to move forward and conquer important issues; these comments are extremely relevant to the work of ELAB and the Forum on Environmental Measurements (FEM). Ms. Autry reiterated that she had been asked to share which ELAB products and efforts fit within Administrator Lisa Jackson's seven priorities. The ELAB's efforts span six of these priorities: (1) taking action on climate change, (2) improving air quality, (3) assuring the safety of chemicals, (4) cleaning up our communities, (5) protecting America's waters, and (6) building strong state and tribal partnerships. The specific ELAB action items that Ms. Autry highlighted in her report were the initiation of the green chemistry and the greening of laboratories discussion, the comparison of laboratory certification and accreditation between the Drinking Water Certification Manual and The NELAC Institute (TNI) Standards to alleviate any

barriers that exist with state partners, efforts on laboratory accreditation and certification in regard to proficiency testing (PT), and work with the Office of Resource Conservation and Recovery (ORCR) on the use of SW-846. The two overarching themes within the Administrator's seven priorities are transparency and scientific integrity. The priority not mentioned above deals with expanding the conversation on environmentalism and working for environmental justice.

Ms. Autry explained that Dr. Paul Anastas, Assistant Administrator for the Office of Research and Development (ORD), released a memo on March 4, 2010, regarding his overarching visions for ORD, which include the recognition that sustainability is the Agency's "true north" and that technological innovation is essential to mission success. The Agency must couple its excellence in problem assessment with excellence in problem-solving and act with a sense of urgency. In his memo to ORD, Dr. Anastas also outlined his key principles of sustainability, which are solution-oriented, relevant, responsive, timely, and full of integrity. The key characteristics used in meeting these principles are catalytic, integrated, transdisciplinary, innovative, and visible. Administrator Jackson presented comments on March 8, 2010, at the National Press Club, and Dr. Anastas' thoughts echoed in her remarks. Ms. Autry provided several highlights of the Administrator's speech and explained that the entire speech is publicly available on the Web. The Administrator stressed that the Agency must develop a new approach that utilizes the nation's strengths of ingenuity, invention, and innovation; reclaim leadership in the development of new products that protect the nation's health and environment; and capitalize on growing green marketplaces domestically and abroad. EPA should be a leader in innovations that protect health and not act as an agency that concentrates on restrictions. The Agency must focus on what can be done and conquer any challenges it faces.

These remarks have been prevalent in all recent EPA discussions, and it is a phenomenal time for the type of work undertaken by the ELAB and FEM: innovative problem-solving. There is an opportunity for ELAB to take advantage of the new "thinking outside the box" mentality and recognize that the Board can accomplish its tasks in a more collaborative and thought-provoking manner to leverage limited resources. Tasks can be conducted with greater consistency by eliminating narrow "stove pipe" mentality. Additionally, it is time to reconstitute the Board's membership, and Ms. Autry has received some applications and interest. EPA's administration is focused on ensuring consistency in its Federal Advisory Committee memberships, but there is a new proactive emphasis on increasing diversity and creativity by transitioning members on and off of these committees more quickly than has been done previously. As such, members are not guaranteed additional terms as they have been in the past. Ms. Autry is willing to make a case for the benefits of consistency for ELAB if she knows that the members have a desire to continue to serve; therefore, members who are interested in pursuing additional terms must send their resumes via e-mail to Ms. Autry with a short statement of interest within the next few weeks. In response to a question, Ms. Autry explained that Mr. Gary Dechant, Ms. Nan Thomey, and Mr. Rock Vitale have reached the end of their eligibility.

Ms. Autry explained that EPA's response to the letter from APHL has been drafted, and it is expected to be sent to APHL by the end of the week. On behalf of APHL, Dr. Wichman thanked EPA for issuing a response. He explained that the association focuses on issues important to state laboratories. The letter was prepared in response to the White House Stakeholder Briefing: The Public Health Benefits of Clean Energy Reform, at which Ms. Heinzerling asked whether there were any additional issues or concerns. APHL has noted the need for state laboratories to enter

the area of emergency preparedness and response, and these laboratories need support from EPA because this area involves analyses that are not routine. State laboratories must balance the regulatory framework with the public health mission as well as perform work under the Safe Drinking Water, Clean Water, and Clean Air Acts. Regarding data standards and exchange, many states lack the ability to report data electronically to EPA and need assistance in this area. APHL encourages EPA, the U.S. Food and Drug Administration, the U.S. Department of Agriculture, and the Centers for Disease Control and Prevention (CDC) to employ a systematic accreditation system because an overarching program for certification would be beneficial for state laboratories. To help accomplish these goals, APHL has asked EPA to create an Office of Laboratory Science and Practices similar to what CDC has done. EPA's response to this recommendation will be released by the next ELAB teleconference; therefore, Ms. Autry will add to the agenda a discussion on this topic.

4. MEASUREMENT/TECHNOLOGY WORKGROUP ACTIVITY

Mr. Jeff Lowry stated that he had contacted Mr. Greg Carroll regarding use of PT data, and Mr. Carroll suggested that he speak with Ms. Wynne Miller, who leads the 6-year review efforts, or someone in her group. Once the appropriate contact person is determined, Mr. Lowry will be able to set up a meeting to discuss PT data use. The survey of the regions was delegated to Dr. Judy Brisbin. Once Mr. Lowry finalizes the questions, Dr. Brisbin will be able to send out the survey. Mr. Speis noted that recommendations could be formulated once more information has been received from Ms. Miller's group and the regions. Mr. Lowry explained that the PT Committee is planning to continue its efforts in this area once it has dealt with some outstanding issues.

5. LABORATORY MANAGEMENT WORKGROUP ACTIVITY

Mr. Dechant reported that the comparison tables had been completed but they need further organization; the Board must determine the next steps and what type of product it will present to EPA. There are differences between what the Office of Water (OW) and TNI are trying to accomplish, which can be seen through differences in the certification programs; they are parallel but not the same. The Drinking Water Certification Manual is a programmatic document that contains material unique to OW's philosophy and its drinking water program; such specific items will not be incorporated into the TNI Standards, which are well on their way to becoming adopted as a general purpose national quality system. Many federal agencies, such as the U.S. Department of Energy and the U.S. Department of Defense (DoD), are adopting the TNI Standards as baseline quality system standards. Mr. Dechant suggested that the Board's recommendation should be for OW to reference the TNI Standards in its quality system requirements and then develop a document that outlines program-specific requirements, similar to the Drinking Water Certification Manual. The regulatory requirements in the Drinking Water Certification Manual probably will not be incorporated into the TNI Standards. EPA must develop a program document that specifies precisely what rules laboratories must follow and ensure that this specificity is well-defined without being redundant to other types of documents.

Mr. Lowry noted that the Drinking Water Certification Manual specifies that the 2003 TNI Standards were sufficient for quality systems and that part of this exercise was to determine

whether this statement still applied following the release of the new TNI Standards. Mr. Dechant explained that this was addressed in the tables. Some issues are vague and imprecise, and OW must state what is specific to its program. For example, EPA must determine whether preserving its retention policies is a significant issue; if not, then these policies should be aligned to more general guidelines to eliminate redundancies among the documents. Basic practices can be referenced to a national standard.

Dr. Jim Pletl asked the Board to revisit the purpose of its study, which was to streamline redundancy, and ensure that the process was following its original purpose. If not, then the Board must decide whether the new direction is acceptable.

Mr. Speis noted that he views the Drinking Water Certification Manual and DoD accreditation in the same manner in that the agency that is receiving information has the right to establish rules regarding generation of that information. This viewpoint puts operational specifications into a contractual perspective. The TNI Standards are a quality system superstructure; this superstructure can be incorporated into OW by removing from the Drinking Water Certification Manual the quality assurance requirements that are similar to the TNI Standards. The Drinking Water Certification Manual then would be a set of standard specifications for water. This type of approach is in place for every other regulatory program, and water should be treated in the same manner.

Dr. Wichman commented that the Drinking Water Certification Manual specifies that primacy states must maintain a principal state laboratory. EPA regions certify these laboratories based on NELAC certification standards for drinking water, but state laboratories still must adhere to the standards contained in the Drinking Water Certification Manual. Mr. Speis reiterated that one document needs to define the overarching quality standards, and the other document needs to define operational specifications that are programmatic requirements. Dr. Wichman added that the TNI Standards can be used across programs. Mr. Jack Farrell commented that some states already are moving in this direction, and new laboratories are adopting the TNI Standards and building program requirements above these standards. Therefore, it makes sense to streamline the process and include a drinking water discipline.

Mr. Dechant noted that the problem with incorporating the drinking water standards into the TNI Standards is that it moves control from EPA into a consensus-standard body. Mr. Farrell clarified that these standards would not be moved into the TNI Standards but placed as a module in the program, similar to what is occurring with programs dealing with stationary air sources. Essentially, it would be an addendum of specific program requirements and would not take control away from EPA. It would combine accreditation and consistency in a streamlined process. Mr. Dechant stated that a key issue within an “umbrella” system is the potential to create a situation in which laboratories cannot comply with both sets of standards. The TNI Standards provide a baseline across all programs so that laboratories can meet all requirements with general quality systems in place; specific program requirements are a different issue. If the substance related to quality systems is removed from the Drinking Water Certification Manual and the programmatic technical specifications remain, the program will continue to be viable with a quality system structure that does not sacrifice the technical specifications set forth by OW. Ms. Morgan noted that this was similar to the ISO system, which specifies technical standards in certain areas in addition to establishing baseline qualifications for basic components.

Mr. Speis reiterated Dr. Pletl's assertion that the Board must decide whether it is accomplishing the original purpose of the study. Mr. Farrell suggested advising EPA to remove the quality system portions of the Drinking Water Certification Manual and adopt the TNI Standards. If record retention is a significant issue, then EPA can suggest that TNI adopt the EPA retention standards. Mr. Dechant commented that all EPA offices currently are dealing with a similar situation in that there is a general purpose quality systems standard for analytical services, and because most EPA offices use analytical services, the Agency must consider carefully how to incorporate national standards into programmatic situations. Once this model has been designed, it can be transferred to other offices. The Board should recommend to EPA that it transfer across offices any model that is developed so that several different approaches are not being employed throughout the Agency. Mr. Speis agreed that there is no need to recreate a model for all programs because the superstructure exists and can accommodate technical specifications for each program; this is an ideal approach.

Dr. Pletl commented that there are pros and cons to both approaches. He noted that the reason for the absence of a national program is because there was too much detail contained in the first attempt to establish such a program, and the states rejected it. A broader program probably would be more accepted. Mr. Farrell noted that the new TNI Standards incorporate the language of ISO 17025 while removing some of the specificity and adding requirements specific to the environmental laboratory approach; therefore, the new TNI Standards already include some of the items being discussed.

Mr. Dechant cautioned that politics may be an issue; stating that it is necessary to follow TNI Standards may imply that NELAC accreditation is necessary, and many states will not want to pay for another state to certify their state laboratories. Dr. Wichman commented that the state laboratories would like to see EPA regions get involved with certification and accreditation. Mr. Dechant agreed that out-of-state certification is a common complaint from state laboratories across the nation. Dr. Wichman added that many state laboratories are not willing to pay nongovernmental organizations for certification. Mr. Dechant noted that the only alternative to paying other states or nongovernmental bodies is for EPA to become an accreditation body, which probably is not a viable option.

Mr. Speis commented that economic barriers hinder out-of-state laboratories. Developing a superstructure allows for a truly independent accreditation process that is nongovernmental in nature. Dr. Wichman noted that the Drinking Water Certification Manual requires state laboratories in primacy states to be certified by an EPA region for their drinking water programs. Mr. Farrell said that one issue is to determine whether there is a model that incorporates the 2009 quality systems portion of the TNI Standards to which the technical and programmatic standards for drinking water can be added, and the second issue is how to implement such a model. A Board member thought that every NELAC accreditation body approaches certification in this manner.

Mr. Speis thought that the Board was close to being able to give constructive recommendations to EPA, including a recommendation that the quality systems standards for drinking water conform to the TNI Standards, thereby making the TNI Standards the superstructure, and that programmatic specifications that are technical in nature will remain in the Drinking Water Certification Manual. Therefore, anything related to quality systems standards in the Drinking Water Certification Manual should be removed. Dr. Pletl reminded the Board that the ultimate

recommendation is limited to the universe of the study, which included only one comparison. Mr. Speis assigned Mr. Dechant, Dr. Wichman, Dr. Pletl, and himself to draft a recommendation letter that could be discussed by the full Board during the next teleconference. The goal is to reach a consensus regarding the approach/recommendation and eliminate redundancy in quality systems standards.

6. MONITORING WORKGROUP ACTIVITY

Ms. Morgan reported that the workgroup met via teleconference the previous day and had a productive conversation that expanded on the information discussed during the prior workgroup meeting. The workgroup members have begun to streamline the information for the partnership with EPA's Design for the Environment (DfE) Program. Ms. Morgan participated in a teleconference with DfE staff; they are very interested in this partnership, indicating the probable beginning of a beneficial relationship between ELAB and DfE. DfE staff has experience with laboratories, which will foster support. The workgroup is determining what the final product should include and collecting information so that when DfE authorizes the partnership, the information will be ready. This is a very exciting collaboration. Information on DfE can be found at <http://www.epa.gov/dfe>. The Program has accomplished a good deal in promoting safer chemistry via partnerships and has a significant amount of educational information on its Web site.

7. WEB SITE INFORMATION FOR WORKGROUPS

Ms. Morgan asked whether a decision had been made in the past regarding publication of workgroup minutes to the ELAB Web Site. Ms. Autry recalled that the previous discussion focused on the need to have a clear distinction between workgroup and ELAB minutes so that it is clear that workgroup efforts do not represent the consensus opinion of the Board. The workgroups are a tool used by ELAB to gather information to better vet conversations initiated among the full Board. As all documentation would be in public view, workgroups would need to be very careful in ensuring that all work is vetted to the entire Board. Ms. Autry supports any decision that the Board makes to publish its workgroup minutes on the Web site to ensure transparency, but they must be characterized and placed in the right context so that no workgroup documents appear to carry the consensus opinion of ELAB.

In response to a question by Mr. Speis and a comment from Dr. Wichman, Ms. Autry explained that per federal law all workgroup minutes are available on request and must be in PDF format. Dr. Wichman suggested an appropriate watermark be added to workgroup minutes. Mr. Dechant noted that TNI committees automatically place a disclaimer at the beginning of all guidance documents, suggesting that this could be done for workgroup products. A Board member noted that given the manner by which Web crawlers work, publication of workgroup minutes could hinder open discussion by workgroup members who might be concerned about how their comments might be interpreted. Mr. Dechant thought that publishing workgroup minutes might generate increased participation from other workgroups. Ms. Morgan asked to withdraw her support if publishing workgroup minutes on the Web could decrease open discussion among members. Ms. Autry reiterated that she was supportive of publishing workgroup minutes on the Web site. Dr. Wichman suggested that workgroup minutes must be approved by the workgroup,

in addition to including the disclaimer, before they could be published on the Web site. A member suggested that each workgroup could decide which of its minutes to publish on the Web site based on the subject of its work and the minutes' potential helpfulness to other workgroups.

Dr. Dechant moved that the posting of workgroup minutes on the Web site be determined by each workgroup with the caveat that the minutes be approved by the workgroup and include the appropriate disclaimer. Mr. Joe Pardue seconded the motion, which passed unanimously without further discussion. Ms. Autry stated that the Board must have a follow-up conversation to reach consensus on the disclaimer during the next teleconference or via e-mail before any workgroup minutes are published on the Web site.

8. NEW ISSUES/UPDATES/ASSIGNMENTS

Ms. Morgan stated that there was no additional information available regarding the sample shipment petition sent to the U.S. Department of Transportation.

Mr. Speis has not had a response from ORCR regarding SW-846, so he will follow up with the office regarding its intent for issuing new letter designations following minor modifications to SW-846 methods. Not including letters in the designation will increase states' understanding that minor method changes do not require reaccreditation. Ms. Autry suggested that Mr. Speis contact Mr. Jim Michael or Ms. Kim Kirkland within ORCR informally via telephone.

Dr. Wichman noted that the deadline for applications for EPA's Water Laboratory Alliance appears to be extended until June 2010, and Ms. Autry confirmed this extension. There will be an article in the next TNI newsletter about the alliance, including a link to the Web site, to publicize it as much as possible. Dr. Wichman indicated that the application process is relatively easy. Mr. Speis mentioned that a competitor had attempted to penetrate the database to retrieve information.

Ms. Autry provided a FEM update. FEM is accomplishing exciting work, and it is a great time for the work it has started because of the increased acceptance of out-of-the-box thinking that is needed for the group to be successful with some of its initiatives. Some of these efforts will involve ELAB at some level, particularly in obtaining the Board's input. FEM successfully created an inventory of all monitoring programs utilized throughout the Agency, including programs for which EPA directs, contributes to, and collaborates on. There were 54 identified needs and gaps in the monitoring program in terms of addressing current and future challenges; items that can be combined or excluded are being identified to create a descriptive list that will be a comprehensive compilation of needs and gaps. Once this is accomplished, these needs and gaps will be addressed by innovative problem-solving, leveraging resources, developing collaborations in all sectors, and advocating technology development.

FEM also is in the process of developing success stories to overcome past weaknesses in communicating the benefits of performance-based measurement systems. Webcasts will be created and shared with regional programs and state offices, with the goal of extending them more broadly. FEM is closing the gap in implementing the measurements and demonstrating their practicality and availability across programs.

FEM has created a series of method validation and peer-review documents; another document on microbiological methods was developed and shared with the Agency 6 weeks ago. FEM also has set a goal to be a better advocate for promoting accreditation to the extent that is practical. The group has drafted a new policy for the use of accreditation organizations for contract vehicles, including environmental data operation of any kind. The policy has been vetted within the program offices, and the input of the contracts division is being sought to ensure that the policy will be utilized when it is complete. The Method Detection/Quantitation and Calibration Glossary has generated a good deal of interest; Ms. Autry suggested that the ELAB members consider examining it. The glossary was created to facilitate a viable conversation across disciplines and was not meant to define terms on a broader scale. Finally, the Call for Papers for the National Environmental Monitoring Conference closed on March 15, 2010; Ms. Autry noted that senior political individuals will be involved in a session on Day 3 of the conference (Wednesday, August 11, 2010).

9. REVIEW ACTION ITEMS/ASSIGNMENTS

Mr. Speis and Ms. Kristen LeBaron of The Scientific Consulting Group, Inc., summarized the action items identified during the meeting.

A detailed list of ELAB action items can be found in Attachment C.

10. CLOSING REMARKS/ADJOURN

Ms. Morgan made a motion to adjourn the meeting, which Mr. Pardue seconded. The vote to adjourn was unanimous, and Mr. Speis adjourned the meeting at 2:57 p.m.

Attachment A

AGENDA
ENVIRONMENTAL LABORATORY ADVISORY BOARD
Monthly Teleconference: 866-299-3188/9195415544#
March 17, 2010; 1:00 – 3:00 p.m. (EDT)

Opening Remarks	Autry/Speis
Roll Call of ELAB Members and Identification of Guests	Speis
Review/Approval of February Minutes	Speis
Measurement/Technology Workgroup Activity Proficiency Testing Issue	Lowry
Laboratory Management Workgroup Activity TNI Standard Comparison With Drinking Water Program Small Laboratory Workgroup	Dechant
Monitoring Workgroup Activity Green Chemistry Sample Shipment Regulations	Morgan
Web Site Information for Workgroups	Morgan
New Issues/Updates/Assignments	All
News/Updates From the DFO	Autry
Review Action Items/Assignments	Speis
Closing Remarks/Adjourn	Autry/Speis

Attachment B**MEMBERSHIP LISTING AND GUESTS**

ELAB TELECONFERENCE
March 17, 2010; 1:00 p.m. – 3:00 p.m. EDT

Attendance (Y/N)	Name	Affiliation
Y	Mr. David (Dave) N. Speis (Chair)	Accutest Laboratories Representing: American Council of Independent Laboratories (ACIL)
Y	Ms. Judith (Judy) R. Morgan (Vice-Chair)	Environmental Science Corp. Representing: Commercial Environmental Laboratories
Y	Ms. Lara P. Autry, DFO	U.S. Environmental Protection Agency Representing: EPA
Y	Dr. Richard Burrows	Test America Inc. Representing: Commercial Laboratory Industry
Y	Mr. Gerald (Gary) Dechant	Analytical Quality Associates, Inc. Representing: Data Users
Y	Mr. John (Jack) E. Farrell, III	Analytical Excellence, Inc. Representing: The NELAC Institute (TNI)
N	Dr. Jeff Flowers	City of Maitland, Florida Representing: Elected Officials of Local Government
N	Dr. Reza Karimi	Battelle Memorial Institute Representing: Nonprofit Research and Development Organizations
Y	Dr. H. M. (Skip) Kingston	Duquesne University Representing: Government Consortiums, Native Americans, and Academia
Y	Mr. Jeffrey (Jeff) C. Lowry	Environmental Resource Associates Representing: Proficiency Testing Providers
Y	Mr. Orval Osborne	Creek Environmental Laboratories, Inc. Representing: Small Laboratories/Native Americans
Y	Mr. Glenn (Joe) J. Pardue, Jr.	Pro2Serve Representing: Clients of QS Services
Y	Dr. Jim Pletl	Hampton Roads Sanitation District Representing: Municipal Environmental Laboratories
N	Ms. Nan Thomey	Environmental Chemistry, Inc. Representing: Owners of Full Service Laboratories
N	Mr. Rock Vitale	Environmental Standards, Inc. Representing: Third Party Assessors
Y	Dr. Michael D. Wichman	University of Iowa Hygienic Laboratory Representing: Association of Public Health Laboratories (APHL)

Attendance (Y/N)	Name	Affiliation
Y	Ms. Kristen LeBaron (Contractor)	The Scientific Consulting Group, Inc. (SCG)
Y	Ms. Lynn Bradley (Guest)	EPA/OEI
Y	Ms. Michelle Wade (Guest)	Kansas Department of Health and Environment
Y	Ms. Patsy Root (Guest)	IDEXX Laboratories

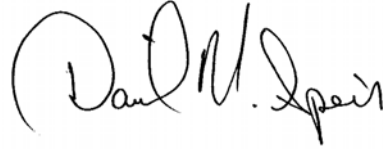
Attachment C

ACTION ITEMS

1. Members who are interested in pursuing additional ELAB terms must send their resumes via e-mail to Ms. Autry with a short statement of interest within the next few weeks.
2. Ms. Autry will place discussion of APHL's request for EPA to establish an Office for Laboratory Sciences and Practices on the agenda for the next teleconference.
3. Mr. Speis, Mr. Dechant, Dr. Wichman, and Dr. Pletl will develop recommendations to EPA regarding decreasing redundancy between the Drinking Water Certification Manual and the TNI Standards.
4. The ELAB members will agree on a disclaimer for the workgroup minutes via e-mail or during the next teleconference before any workgroup minutes are posted to the Web site.
5. Mr. Speis will informally contact Mr. Michael or Ms. Kirkland (ORCR) to determine EPA's intent regarding issuing new letter designations following minor modifications to SW-846 methods.
6. Ms. LeBaron of The Scientific Consulting Group will incorporate the appropriate change to the February teleconference minutes and forward them to Ms. Autry.

Attachment D

I hereby certify that this is the final version of the minutes for the Environmental Laboratory Advisory Board Meeting held on March 17, 2010.

A handwritten signature in black ink, appearing to read "David N. Speis", written over a horizontal line.

Signature Chair

Mr. David N. Speis

Print Name Chair