

**SUMMARY OF THE
ENVIRONMENTAL LABORATORY ADVISORY BOARD MEETING**

Teleconference: 866-299-3188/9195415544#

January 12, 2009; 1:30 – 5:00 PM

The Environmental Laboratory Advisory Board (ELAB or Board) face-to-face meeting was held on January 12, 2009 from 1:30 to 5:00 PM EDT in conjunction with the Forum on Laboratory Accreditation in Miami, Florida. The meeting took place during The Forum on Laboratory Accreditation meeting sponsored by The NELAC Institute. The agenda and attachments for this meeting are provided as Attachment A, a list of board members, invited speaker and public commenters is provided as Attachment B. The Board meeting was held as the only session on Monday afternoon of the Forum on Laboratory Accreditation, and all conference attendees were encouraged to participate. Approximately 300 were present during the meeting. Only attendees who provided public comments or questions are listed in Attachment B. 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/ROLL CALL

Ms. Lara Autry, the designated federal official for ELAB, provided a short explanation of ELAB and the purpose of the meeting to the audience and introduced Dr. Jeff Flowers, the current Board Chairman. Dr. Flowers began the Board meeting by welcoming the audience and thanking the NELAC Institute (TNI) for allowing the ELAB time to hold their monthly meeting on the first day of the conference. He invited the attendees to participate and provide feedback about current items on the Board's agenda during public periods of discussion. The purpose of ELAB is to provide the EPA with advice regarding laboratory accreditation and environmental testing in the United States.

Dr. Flowers stated that the Board is a consensus body representing a diverse cross-section of the interest groups throughout the county. The public is invited to attend any of the Board's meetings or conference calls, which are held the third Wednesday of every month. For the sake of those attending who are unfamiliar with ELAB, Dr. Flowers then introduced members of the Board who were at the conference or on the phone. A list of ELAB members and their affiliations is included in Attachment B.

Dr. Flowers then described ELAB's purpose as bringing together a diverse constituency to come to a consensus on issues important to the agency. In the last meeting in August, SW-846 method issues involving laboratory accreditation and new method release were brought to ELAB. The Board has held a number of meetings on the topic and has attempted to include involved parties (e.g., ELAB, EPA/OSW, Laboratories and States) in the resolution process. The bottom line of the issue is that commercial laboratories have to demonstrate competency in multiple versions of the same methods, which is very expensive and difficult to manage. Dr. Flowers also cited the variety of ways the SW-846

methods are used among different States. ELAB hopes to resolve the issue in such a way that laboratories can use the SW-846 methods in a more cost-effective way without having to certify or accredit multiple methods due to small changes amongst different method versions.

2. REVIEW AND APPROVAL OF NOVEMBER MEETING MINUTES

Dr. Flowers asked for any changes to the December 17, 2008 meeting minutes. Mr. Jeff Lowry stated that he had submitted comments to Dr. Flowers in written form. Dr. Skip Kingston attempted to make a comment, however the phone connection was breaking up and the comments could not be heard. Dr. Flowers noted that on page 17 of the meeting minutes, Mr. Dave Speis was referred to as “Jack” Speis and this would need to be changed. Ms. Autry will forward comments submitted electronically to the note takers. Mr. Jack Farrell made a motion that the minutes be accepted as amended, Mr. Speis seconded the motion and Dr. Flowers called for a vote. The amended minutes were passed unanimously.

3. METHOD IDENTIFICATION ISSUE WITH SW-846

Ms. Lara Autry introduced Ms. Lee Hoffman and Ms. Kim Kirkland from the EPA Office of Solid Waste and Emergency Response (OSWER or OSW). Ms. Autry expressed that the Board is very grateful to hear directly from the interest groups about the issues with SW-846 methods revision and release raised at the August meeting. Ms. Autry reminded the audience that this is a resolution process that will take time and feedback from the community to resolve the issues.

A. ELAB Presentation of the SW-846 Issue

To start the SW-846 discussion, Mr. Speis presented a brief slide presentation to set the background and review the questions that initiated ELAB’s current involvement with the issue to update and implement SW-846. He stated that the issue first arose at the NEMC conference in August 2008, but actually began in January 2008, when the OSW published a Federal Register notice that 47 new or revised methods were available and 44 older methods had been deleted as “obsolete.” He noted that there is a difference in opinion on what is considered obsolete by different stakeholder parties. The stakeholder population expressed concern about how the new method versions should be used without clear language from OSW. The general stakeholder assumption is that newer method versions provide improved quality or are more cost effective than methods they replaced. Some stakeholders assumed previous versions became obsolete when they receive notice of new methods from OSW.

ELAB is convinced that many of the regulatory bodies are confused about the use of these newly released methods and the associated quality control related to these methods. There is also confusion in regards to summary methods that have become difficult to implement in the laboratory. This includes concerns about piecemeal approaches for

monitoring and remediation. Some confusion arises on how the new methods are applied when there is a regulatory consent decree or a permit that requires a specific version of the SW-846 methods. There has been confusion about interstate acceptance of laboratory accreditation by States that accredit to the newest methods versus States that require accreditation to requirements in multiple versions of the same method. The laboratories also face confusion in having to manage many different methods that have similar implementation since maintaining multiple methods for the same method increases analytical and management costs. This can result in confusion when executing the methods. Application of different methods with conflicting quality control criteria can result in miss-reporting of analytical data packages.

Mr. Speis added that ELAB believes OSW is only *one* of the key players with a role to find a solution to the SW-846 method version release issue. He emphasized that the State agencies also bare some responsibility in how they interpret and implement new methods released from OSW. Fortunately, the Board was able to have Ms. Hoffman and Ms. Kirkland from OSW at this meeting to work with the Board, State regulators, and other interest groups on this issue.

Mr. Speis then described ELAB's timeline for involvement in this issue. Starting in September 2008, during the NEMC conference, there was a "lively" discussion from stakeholders on the topic. Subsequently, the American Council of Independent Laboratories (ACIL) submitted a letter to the Board expressing their concerns with the new SW-846 method release and suggesting several approaches for OSW to use in resolving the issues. In mid-October 2008, ELAB developed a strategy and engaged OSW in continuing discussions potential solutions to the issues.

Approximately six weeks ago, the Board presented a series of questions to OSW about key items the Board and stakeholders need to know about revising and releasing OSW methods. Mr. Speis read several key questions that were included in his slide presentation. Included were questions related to OSW policy on revising new methods and the need for guidance from OSW to eliminate the confusion when multiple versions of the methods are in existence. Laboratories are confused because both the existing and revised procedures are essentially the same method using same technologies. The laboratory stakeholders asked for relief from the State regulators on requirements to be accredited for multiple versions of the same method. Such relief would reduce confusion and promote consistency for application of the methods. Stakeholders would like to know the criteria EPA uses for revising or releasing methods. The Board would like to reach a point where there is very clear language from OSW that tells the stakeholder community how these new method versions should be applied by laboratories and how the States should request the OSW methods when they set up regulatory programs. Stakeholders also need to know the OSW timeline for addressing and resolving the SW-846 methods issues discussed with ELAB.

Mr. Speis stressed the Board's objectives and established ground rules for discussion as moving forward from this common background on the issues to a positive, solution-oriented discussion between all parties. ELAB's role in the discussion is as a facilitator,

to provide input and recommendations to EPA to help them develop solutions. The audience's role is to provide input and identify issues because the audience represents various parts of the stakeholder community. The Board will work with the agency until the issue is resolved and there is implementation of a solution. Mr. Speis then introduced Ms. Hoffman, who along with Ms. Kirkland presented a slide summary of OSW's perspective of the issue.

B. OSW Presentation of the SW-846 Method Issue

Ms. Hoffman began her presentation by thanking ELAB and TNI for the opportunity to attend and take part in the discussion concerning the issues surrounding the SW-846 methods. She commented that her attendance at the conference has given her a better perspective on the issue and really appreciates the opportunity to come to this meeting and talk to everyone. She introduced herself as the acting director of the Economics, Methods, and Risk Analysis Division at OSW and Ms. Kirkland as a chemist and the team leader of the Methods Team. Ms. Hoffman added that she is a toxicologist by training and understands the importance of the issues from the laboratory perspective, because it feeds into her work as a toxicologist for EPA.

Ms. Hoffman stated that the OSW has heard from ELAB and brought the issues to OSW management. She has the support of Mr. Matt Hale, the OSW Office Director, in working with the Board and stakeholders to reach a solution that is good for all involved. She stressed that the OSW needs the community's help understanding and developing solutions to the issues. Ms. Hoffman stressed that this meeting is only one step in the entire process and added that she is impressed with the diverse group of stakeholders present in the audience. Ms. Hoffman began her slides, stating that she would not repeat the discussion of the questions that Mr. Speis had done so well in the ELAB presentation. Ms. Hoffman spoke on OSW general policy and Ms. Kirkland spoke on technical issues.

In terms of the SW-846 policy issues, the agency has heard the concerns about clarification about method status and which is the final version. She also cited the issue of some States not adopting final versions of particular methods and the resources required to certify multiple method versions. Ms. Hoffman stated she understood that OSW needs to do a better job of communicating with the stakeholder community how versions vary and why multiple versions exist. She asked if the OSW should adopt criteria for when the agency changes a method. She added there is confusion since paper copies of the methods have been largely replaced by electronic communication. The issue for OSW is how to improve the communication with stakeholders.

The OSW's is committed to releasing the 4th edition of the method compendium which should resolve many of the issues. The OSW is working very hard to complete this edition and she is sure this group understands the large undertaking required to complete this release. This edition will go a long way toward solving issues and communication on which methods are obsolete or problematic. Finally she re-emphasized that the OSW needs suggestions from the stakeholders to create a solution and invited stakeholders to talk to her and Ms. Kirkland as well.

Ms. Kirkland then began her presentation, providing explanation of the origin and the complete name of what is known as SW-846. The SW stands for solid waste and 846 was the 846th method compendium brought forth by the agency. In this compendium, the agency strives to develop and publish appropriate analytical methods for testing RCRA wastes. OSW has made an attempt to address the topics submitted by ELAB; both groups want to help establish better communication on which is the final version of these methods. She added that OSW has adopted a general policy involving a performance-based approach, rather than the more prescriptive approach of the past because of the different matrices involved. There are also 25 methods that are called “method defined parameters” which are to be performed “prescriptively.” The majority of methods are performance-based and emphasize data quality objectives and whether the methods can meet these objectives in the matrix and at the action level of concern.

Ms. Kirkland stated that she is commonly asked if laboratories are required to use the SW-846 methods to be RCRA compliant. The answer is no, the regulated community can use other applicable methods, (e.g., ASTM standard methods) as long as they meet or exceed the RCRA compliant data quality objectives.

Ms. Kirkland stated that the agency strongly recommends that method users performing OSW methods follow the most recent version. OSW reviews data based on whether the method used to generate the data meets the data quality objectives rather than which version of the method was used.

OSW uses the word “obsolete” only to show a method has been removed from the SW-846 method compendium. Many of the versions do not technically vary much. When OSW changes or clarifies a new method, it gets a new suffix (e.g., a, b, c) even if the changes are minor. Any changes to methods that result in new method versions are tracked in the RCRA docket. She added that OSW could do a better job of communicating why methods are labeled obsolete, whether it is because of a technical change or editorial. OSW is also considering putting changes reported in the RCRA docket on the RCRA Web page to help stakeholders determine why changes were made.

Flawed or outdated methods are another category and are removed from the compendium because they are problematic. For example, the method for reactive cyanide analysis had unique circumstances for use in dumpster sample analysis. The method was not broadly applicable to other RCRA samples because it gave false positive results. This method was identified as flawed and withdrawn completely from SW 846. Any method that provides false negatives is a risk to public health and thus is removed.

“Outdated” methods are ones removed from the compendium because the technology is so old that no one uses it and it is no longer necessary to include the method in the compendium.

Ms. Kirkland discussed specific questions raised by ELAB. One topic raised by ELAB is why OSW keeps previous versions of updated methods available for use. Ms. Kirkland

stated that this is because of the fact that permits can last five years and those permits are often method-specific. She also mentioned that older method versions may be needed for consistency with other compliance tests or to provide consistency with old data from a previous program. Another factor that prevents the OSW from removing old method versions is the fact that occasionally newer versions require more updated technology and some smaller labs do not have the funding available to purchase the latest and greatest technologies available. The OSW wants to promote new, better, cheaper, or faster technologies so these new methods are added to the compendium as appropriate.

ELAB also asked if the agency could provide a more unique numbering system to better distinguish method versions. There are currently two versions to identify methods and version. First is an alpha-number system for a method has a designated number and each revision receives a sequential letter suffix. Second, each method or revision is tracked by date available. Ms. Kirkland stated the agency was open to suggestions if someone has a more clear strategy for labeling method versions.

Ms. Kirkland stated that the latest version is placed on the Web and once posted it is considered final. There is also a category of new “draft” methods. These new methods are complete and have gone through validation and work group review, but have not yet been through the final agency review and signoff process. Typically, this does not mean there is anything wrong with the draft method. She indicated that posting new methods as “draft” may cause some confusion. She added that the process of getting methods through the agency review process or removing methods is long. Ms. Kirkland referred the participants to the OSW methods Web site for a list of methods with their status and when the current version was published.

Ms. Kirkland described the criteria for OSW method publication. Methods are submitted to OSW by a variety of interest groups. The first thing the agency establishes is whether there is a regulatory need for a new or revised method. The agency will then ask the interest group or method-writer to submit its method and supporting information based on agency guidelines available on the Web page. After submittal, OSW will then form a focus group composed of experts in the field of measurement addressed by the method. These experts can be from the regulated community or the regions or other experts in the field. The method is reviewed according to formal agency review process, issues are resolved, and supporting documentation is evaluated for completeness. The reviewed method will then be formally presented to the workgroup at the NEMC conference and at Laboratory Technical Information Group (LTIG) meetings at regional laboratory locations. Based on the workgroup review, EPA decides if the method is applicable and reviews whether the method underwent single or multi-laboratory validation. Finally, the method goes through an Agency review with other EPA offices that have agreements with OSW. Once all of the reviews are complete and each office signs off approving the new method (with or without comment) the method is returned to OSW for preparation of the appropriate rulemaking or notice in the Federal Register. The OSW publishes new methods for notice and comment even though this is not a requirement for publication.

ELAB also asked OSW if it could provide a position statement on how it will interact with stakeholders to develop solutions to issues. She added that ELAB has submitted language to the agency, which is currently being reviewed. OSW will continue to dialog with ELAB, participate in ELAB meetings, consider suggestions from the Board and review stakeholder input with OSW management. When OSW releases a notice, Ms. Kirkland develops questions and answers, fact sheets, and communication strategies for including distribution to the appropriate individuals or groups. Ms Kirkland was not sure ELAB was on the communication distribution list for these documents but the Board could be added.

The last ELAB question addressed by Ms. Kirkland covered quality assurance and quality control differences between method versions. She stated that this was not the norm for revised methods. Since this occurs only in a select few cases, she asked if the stakeholders would bring them to OSW attention and resolution. She then discussed the specific method versions, Method 8000B and 8000C, in which there is a significant quality control difference. She commented that 8000C has tighter QA/QC requirements and she understood there might be some confusion with State regulators. Version 8000B will be withdrawn with the forthcoming release of the 4th Edition of the compendium. Ms. Kirkland closed her presentation stating she believes OSW and the stakeholders want methods that use the best technology available. Newer methods are often but not always better than previous versions. The OSW wants to work with the community find better solutions to the issues regarding method releases.

C. Floor Discussion of the SW-846 Method Issue

Dr. Flowers introduced the general discussion on the SW-846 method release issues, stating that OSW and the Board agreed they only represent two corners of the triangle of stakeholders on these issues; the final corner is the States. ELAB anticipated State representatives would be in attendance to participate at today's meeting. He expressed the Board's hope that would include State contributions toward clarifying the issues and moving toward solutions.

Mr. Joseph Aiello from the New Jersey Department of Environmental Protection agreed with the current approach taken by OSW on method release. From a laboratory accreditation perspective, NJDEP promotes using the most current version of the SW-846 methods. For accreditation, it is important to identify the version of the method in use by the laboratory, especially when a State grants laboratories for secondary accreditation. From the OSW perspective shown in the slides, he agrees with their statement on the four primary concerns addressed. Mr. Aiello added that this is the first time he has heard the OSW is promoting the use of the most recent version while still leaving the decision to use older versions to the local regulatory authority on a case by case basis. He added that regulatory authorities will have to be made aware of the release of different versions. While he does not have a specific plan in mind to resolve the method release and communication issues, Mr. Aiello requested stronger language from the OSW that tells method users to use the most recent method version. This type of language would help State regulators with laboratory accreditation issues as well as site remediation programs.

Dr. Flowers responded to Mr. Aiello's comments, asking if there was another entity involved with these issues, namely the people who write the permits and specify the method used. Mr. Aiello stated that in the case of his agency, typically when he asks people involved with site remediation programs to include the most recent method in Quality Assurance Project Plans (QAPPs), they agree. However, some permit writers who deal with the detailed legal aspects of permits want to keep the older methods available.

ELAB member Mr. Gary Dechant asked if there was an accrediting body at the meeting that does not accredit to the latest SW-846 methods and why? Mr. George Kulasingam, Chief of the laboratory accreditation program that resides in the California Department of Public Health (CA DOH), stated that in California the ability to approve use of specific methods resides outside his department in the California Department of Toxic Substances Control (DTSC). When he receives requests for accrediting to the latest version of the method, he passes the request to DTSC because without their approval he has no authority to adopt revised methods in the laboratory accreditation program. He asked how a solution could be found. He asked whether EPA should work with the DTSC to resolve this problem and to facilitate similar accreditation standards that would allow CA DOH to extend accreditation through reciprocity with other accrediting bodies. The approval issue between different California departments hinders headway to approve use of the most current OSW methods.

Dr. Flowers asked the State representatives whether stronger OSW language, or guidance on use of revised methods would empower States to resolve conflicts and make changes in the various programs that rely on OSW methods. Dr. Flowers re-iterated that the Board and OSW want to hear from the stakeholder community on solutions.

Mr. Ron Turpin from Illinois stated that he sees these issues as part of a systematic problem. To answer the Dr. Flowers specific question, in Illinois laboratories that perform RCRA permits, compliance, and monitoring do not have to be accredited. They can voluntarily request State accreditation. However, regulations for some projects such as State remedial and leaking underground storage tank projects require data from an accredited laboratory and specify the particular SW-846 method version that must be used. Because these regulations have not been updated to the 4th Edition of SW-846, there is no reason for Illinois to accredit for the newest methods. This put the laboratories in the position of being accredited by the State for older versions of the methods while being able to run the newer methods for projects that do not require accreditation. Mr. Turpin added that it would be nice to be able to accredit for both versions of the OSW methods to accommodate laboratories desiring accreditation for both 3rd Edition and 4th Edition SW-846 methods, but the State does not have the resources to maintain accreditation capabilities for both old and new method versions. However, the State is in the process of trying to update the Illinois accreditation program to include the 4th Edition by the last quarter of 2009.

Dr. Flowers asked whether an EPA statement that the newest SW-846 method version was at least as good as or better than previous versions would empower the States to use the newest versions, even if not specifically written in the law. Mr. Turpin replied that kind of statement would not help resolve the issue because the statement of equivalency would not relieve the burden of the legal requirement to do what the regulation requires if it specifies a particular version of an OSW method. The larger issue is that individual EPA offices write methods for specific EPA programs and it would be better if the agency were to create an EPA-wide methods office to write all methods for the programs to adopt. As an alternative, EPA could stop writing methods and adopt consensus methods in the regulations instead. Office of Water and Wastewater programs have moved in this direction with their method update rule that emphasizes using standard methods and ASTM methods as opposed to EPA methods.

Mr. Steve Arms, Florida Department of Health (DOH), mentioned an example in Florida that appears to work well for the State. Florida does not accredit to particular version of the SW-846 methods. This allows the laboratories the flexibility to update when needed or to perform the test method appropriate for the project they are working on. He also understands the reciprocity issues that Mr. Aiello mentioned. Florida accredits to an SW-846 method number, not to a particular version. The State accredits based on the laboratory's standard operating procedure (SOP) for each method. Mr. Dechant asked if this approach puts the State in the position allowing the programs to request the version of the methods necessary for their work and the assessment is done to the requirements of the version required by the program. Ms. Silki Labie with Florida DOH replied that if the version a laboratory uses generates data that can be used by the program to make decisions, FL DOH is not concerned with the version being used. Mr. Speis from the ELAB commented that if we are in a position where either method can produce good data useful to the program then why is there a problem. Is there a true concern that data from the different versions is not interchangeable? Ms. Kirkland commented that interchangeability of the versions may be possible but EPA does not assess whether method versions meet the program needs—that's a program responsibility. Data from each EPA program is evaluated to determine if it is adequate to make decisions irrespective of which version of an SW-846 method was used. New methods provide techniques to make needed measurements, but sometimes revisions to existing methods provide clarification without making significant technical changes to a method.

Ms. Brooke Conner from USGS asked about the long term affect of not tracking the method version on secondary data use such as trends analysis which may be sensitive to improved performance as method versions change. Ms. Hoffman offered that approval and release of the 4th Edition of the SW-846 Manual will take care of many of these issues.

Mr. Larry Jackson, EQM, Inc., asked about the withdrawal of old methods and publication of new methods. He referred to a statement in the slide on this topic that said was not EPA's intent to prohibit the use of withdrawn methods. Later in the slide, EPA indicated obsolete and flawed analytical methods would be withdrawn. The speaker discussed how obsolete methods still had value. He stated that a method known to be

flawed does not have value. He asked EPA to reconsider their approach and to completely remove methods that are known to be flawed or EPA should publish information on what the flaw is so that laboratories and assessors can determine if the flaw affects the intended use of the data.

He also asked for clarification about the differences between method versions 8000B and 8000C. There are sections in Method 8000C that forbid some of the techniques required in 8000B. He asked for specific clarifying language on the use of these two versions if EPA does not intend to completely remove Method 8000B as flawed. In general he asked for clear guidance stating that older methods should not be used unless they fall under the requirement of an existing permit or they have been documented to meet the needs of the project. Ms. Kirkland replied that EPA is completely withdrawing Method 8000B but the withdrawal process takes time. When EPA is asked about these two methods they tell laboratories not use Method 8000B and Method 8000C is the preferred method. She reiterated that the differences between these two versions are not the norm. When methods are found to be flawed and are withdrawn, EPA posts the reasons the method is flawed and why it has been withdrawn. The withdrawal may have to go through a rulemaking process that can take 12 to 18 months. Mr. Dechant from ELAB asked if there is a place on the OSW Web site that isolates and identifies methods in the process of being withdrawn because they are flawed. Ms. Hoffman replied that this is the kind of feedback OSW is looking for so the agency can find ways of communicating better. While OSW believed it had communicated the issues with the Method 8000 versions but apparently this was not sufficient. Thus, EPA needs this type of feedback to improve the communication process with stakeholders.

Dr. Reza Karimi from ELAB asked about data generated by flawed methods. What does EPA do with data that is acquired from methods found to be flawed? Ms. Hoffman replied that this is why the agency has to be careful when designating flawed methods—taking the withdrawal process step by step, evaluating the flaw, evaluating the effect of the data, withdrawing the method, and notifying affected parties.

Mr. Bob Wyeth from Columbia Analytical went back to the topic of agency method review, stating that it meets peer review requirements. He asked if these peer reviews are done within the agency, or whether people outside the agency are included. If this process is not external, he asked whether there were any possibility it could be made to include external review. He said there is an abundance of scientific knowledge that could support the agency if the review process included external reviewers. Ms. Kirkland replied that the small group that performs the review is composed of people from outside the agency. EPA guidance for method review requires three independent peer reviews. Peer review can also consist of published journal articles or consensus standards if the method has been used by the scientific community.

Mr. Wyeth shared his enthusiasm with OSW promoting the use of newest method versions and recommended that all the regulatory agencies start to incorporate the same type of language into their regulations while moving away from specific reference to a method version. Regardless of a State accreditor's flexibility on this issue, laboratories

are still faced with the cost of maintaining multiple methods. The larger the number of similar methods maintained by a laboratory, the more problematic and costly the management becomes. Most large laboratories are running multiple versions of the solid waste methods, which is really problematic. Mr. Wyeth then urged all the stakeholders to accept, require, and use the most current version of OSW methods.

Ms. Marlene Moore from Advanced Systems Inc. suggested that data users are also a very important part of the process. Since data users do not understand what the data are saying, they want consistency in the data and require everyone use the same method to get the same data. She recommended EPA spend more time training data users at the State level what the DQO and the systematic data planning process is all about and how this planning leads to selecting the appropriate methods. Selecting the right method is not a laboratory issue, it is a data user issue. For some programs, the latest methods may not work in a specific matrix. Laboratories can demonstrate competence to a particular accreditation or certification standard. The laboratories need to be instructed in the contract negotiation process to use methods that produce data consistent with the users' needs whether that be consistency with the previous data or ability to measure to meet regulatory limits, or demonstrate to the public that data are correct in the matrix of concern. That is the record that needs to be on file as the method requirement. It is important to educate the data users in this process of how to specify the method needed for their project or program rather than putting the burden on the laboratories to make these decisions for the data users.

Ms. Kristen McCracken from Test America in Burlington, VT stated that she had not had a single request from her clients to go to the latest version of the OSW methods. Her clients all want to maintain the previous version for data consistency. Since her clients are not requesting the latest version, Test America has no reason to shift to them. She stated that OSW needs to convince data users that the newest method is the best method. If a State required accreditation to the newest version of an OSW method, then before Test America would change, they would have to convince the client that the latest version is sufficiently improved to justify the change. Otherwise, the company would have a dilemma between what States accredit and what clients require.

Mr. Gary Dechant from ELAB directed a question to the OSW presenters. He stated his opinion that by publishing the new method, the OSW would have determined the impact of the new method version on the data. He asked if information on the impact of a new method was available to stakeholders. He asked if these evaluations are published to allow stakeholders to evaluate the types of changes, editorial or technical, and how the changes affect the data.

Ms. Kirkland replied that all version changes that are accepted or rejected are published in the RCRA docket. If stakeholders have not seen the docket they would not have the type of information Mr. Dechant references. Furthermore, the more extensive data on evaluation of the method are not available. Ms. Hoffman added that this question is an example of the possible issues with communication between OSW and the stakeholders. Much of the information stakeholders need is in the docket but not easy to find. She

asked the audience for ideas on a better way to communicate this type of information. Mr. Dechant added that it is important to know all of the changes both editorial and technical. It is important to know if a method change is a relatively small editorial change that does not affect the data when you are trying to convince someone that the change does not matter or the methods are equivalent.

Mr. Wyeth stated that he agreed with Ms. Moore's comments regarding the data users. He agreed there are some opportunities for laboratories to work with data users to confirm that the data to be generated will work for the intended end use. In his opinion, laboratories face a problem due to the large number of methods and variations on the methods for solid waste analysis. In reality, the laboratories must maintain three or four different versions of the same method because they do not have the time or opportunity to work out the issues of the versions with multiple clients.

4. TNI STANDARD COMPARISON WITH DRINKING WATER PROGRAM

Dr. Flowers began the afternoon session by introducing Mr. Gary Dechant and his presentation on comparison of laboratory assessment programs. Mr. Dechant began his presentation of the TNI Standard Comparison with the Office of Water (OW) drinking water program stating that he was at the beginning of project to compare the TNI laboratory accreditation standard to the OW drinking water laboratory certification manual. The issue was brought to the Board about six months ago as a request to perform a comparison between revised 2007 TNI standard to the combined Fifth Edition and Supplement 1 of the manual for certification of drinking water laboratories. The goal of the project is to provide sufficient information to prepare an EPA guidance document and recommendations regarding national drinking water laboratory accreditation standards.

Mr. Dechant stated that a rough draft of the comparison has been developed by Eastern Research Group (ERG) for ELAB. The draft of the comparison provides ELAB with technical similarities and differences between the two programs. The project has been assigned to the ELAB Laboratory Management Workgroup. The workgroup has only had the draft document for two or three weeks and has just started the review stage of the process. ELAB has arranged for participation by TNI, EPA's OW as well as the American Water Works Association (AWWA). Other interested stakeholders were invited to participate in the review. The workgroup has started reviewing major topics of comparison.

The workgroup's plan is to host one-hour conference calls once a month on the third Friday. Mr. Dechant requested email addresses from conference attendees interested in participating in the calls. The workgroup plans to issue a report to ELAB, which will then make its recommendations to the EPA concerning similarities and differences in the laboratory assessment programs. Dr. Flowers reiterated that the purpose of the review was to show similarities and differences between the two programs. While the document was begun by a consultant, it is not yet an ELAB document, so the goal of the workgroup and the Board is to embellish, edit, and revise based on ELAB expertise to generate an ELAB product used to support recommendations to EPA. It is also an outreach

opportunity for ELAB to share information with groups not involved with the TNI standards process. He indicated the timing for completing the comparison was this summer. Mr. Dechant agreed that it is the workgroup's intention to have an ELAB draft completed by the next face-to-face meeting scheduled in August. He also requested that if anyone had a good working knowledge with the Clean Water Manual, that person's experience and involvement would be appreciated.

ELAB member Mr. Jack Farrell asked when the workgroup wanted feedback from the focus groups like AWWA. He added that a draft copy of the comparison is available upon request to interested groups. The AWWA has a copy and an internal team of 20 people throughout their organizations is reviewing the draft. They plan to provide a written response, which will be provided to representatives who participate in conference calls. This option to read and provide written comments and/or participate in conference calls is available to all interested parties. The Laboratory Management Workgroup will kickoff the review process on a conference call to be held on the third Friday in February. He believes that the review of this document will be a long process. The first draft of the comparison is over 60 pages of comparison tables and notes. The supporting TNI document is over 500 pages long and the drinking water document is over 200 pages long. Both documents have fairly different scopes of work and each contain a lot of technical information.

Dr. Flowers reiterated that the existing comparison document is a draft. While ERG has worked diligently to compile the document, it has not been reviewed or edited by ELAB. That's the next step in the process. The Board has started reviewing the comparison document now intends to give it a serious review. Ms. Autry also added that if there are any stakeholder groups that the Board may have missed for comment, please let a member of ELAB know so that group is included in the review and comment process.

Ms. June Flowers from Flowers Chemical Laboratories stated that she was not sure she understood the ultimate goal of project. Mr. Dechant replied that the purpose is to provide the EPA with enough information to determine what future path to take with the drinking water manual, whether it remains stand alone or whether it could be incorporated into the TNI process. The Board wants to make a good recommendation and justification for advice on applying different approaches to laboratory certification. Ms. Autry stated that the Board may ultimately compare other laboratory assessment documents and standards with a goal to foster a national accreditation program where differences between programs are identified so that either standard could be improved. Either EPA or TNI may discover through this process there are improvements either program can make to individual standards to reach an ultimate goal of uniformity in a national program for laboratory accreditation or certification. The process can expand to other assessment programs in air or solid waste using this comparison as a route to more uniform assessment standards.

Dr. Flowers stated as a follow-up that this project presents an outreach opportunity for other organizations or groups to participate, provide feedback, and gain familiarity to current laboratory assessment standards. Mr. Wyeth recommended including the

American Public Health Association in the review. He also commented that he was able to take a look at the document. He referred to a previous and similar document prepared by Versar for ELAB to identify similarities and differences in the two programs based on the previous versions of the assessment standards. He stated his belief that OW will always want to have its own drinking water laboratory certification standard. Based on his quick review he believed it would be easier to modify the TNI standard rather than have EPA revise the drinking water laboratory certification manual. Mr. Farrell agreed with Mr. Wyeth and added that the comparison ELAB is generating will be the source document for changes to the standards.

Dr. Flowers asked if there was additional public comment regarding the comparison document. Mr. Farrell asked when the ELAB wanted public comment. Mr. Dechant replied that the third Friday in March (the second scheduled conference call for the ELAB workgroup) would be ideal. Mr. Wyeth asked if the Board plans to validate the crosswalk, stating that this would be the most time-consuming part of the review. Dr. Flowers answered that the Board would validate the document to ensure ELAB agreed with it.

Mr. Dechant commented that there were two issues to consider regarding the first draft of the document: the crosswalk was originally written intentionally by an organization not extremely knowledgeable about either assessment standard. The Board needs to make sure the wording in the comparison is clear and concise and reflects the wording of the two standards. For this to happen, the Board will need experts on both standards to review and validate the document. Dr. Flowers stated that there are parts of the TNI program on policies and procedures that are not written in the standard, so those items were not included in the crosswalk and the Board will need to insert that information. For the most part, the first draft includes the information needed for the comparison and the additions probably amount to 5 percent more than what is already written. The important goal is to get input over the next two months so stakeholders can have an impact on ELAB's decision and recommendation process.

Board member Dr. Michael Wichman stated that he has also shared the document with the Association of Public Health Laboratories (APHL) for comment. Ms. Autry said that stakeholders should ask Mr. Dechant for a copy of the draft comparison since the Board will not be placing this initial draft on the ELAB Web site. Dr. Flowers added that all Board members have access to the document and can distribute it, as well.

Ms. Mitzi Miller from EQM Inc. asked if the Board would deal with the use of requirement language such as should/shall/must. There are huge implications in those terminologies that are very different between the two programs. Mr. Dechant replied that it is the intent of the comparison to point that out these differences. The obvious issue is what parts of the standards are similar and which parts are different enough to cause implementation problems. Ms. Miller added that her experience includes assessment of non-NELAC certified laboratories and the major difference in interpretation laboratories make between the two standards. Mr. Dechant replied that he would add Ms. Miller to his

email list for further comment. Dr. Flowers ended the comparison document discussion, asking for input within the next couple of months.

5. PROFICIENCY TEST FREQUENCY UPDATE/DISCUSSION

Dr. Flowers began discussion of ELAB activity on the proficiency test (PT) frequency issues, referring to a survey of the laboratories organized by Board member Ms. Judy Morgan. The issue is whether one or two proficiency tests per year are sufficient for quality assurance purposes. He then asked Ms. Morgan to present a review of the proficiency test frequency study findings.

Ms. Morgan summarized findings of the study conducted to address PT frequency questions. Several hundred laboratories participated in the survey. The performance testing portion of the survey addressed several main questions. One question was regarding laboratory participation. A total of 77.2 percent of laboratories participating in the survey were water pollution testing facilities. The remainder of the participants included laboratories analyzing non-water matrixes. The survey contained useful data from all responding laboratories and additional written comments from 25 laboratories. For the study, laboratories determined the cost to analyze PT samples is 1.25 to 1.5 times the purchase price of the PT sample.

The majority of laboratories reported that PT samples are important to the quality of their program. Most laboratories stated that they thought one per year was sufficient and additional PT samples do not increase the laboratory's marketability. Ms. Morgan stated that it was interesting to hear from the laboratories that PTs help the overall quality process, although most laboratories agree that one PT per year is enough.

Dr. Flowers followed up Ms. Morgan's presentation by stating that ELAB is studying the issue and will come to a conclusion on the PT frequency issue. ELAB is currently following the activities of the PT subcommittee and waiting for release of its final report on the issue. The TNI PT subcommittee has developed spreadsheets to summarize the data and made them available on the TNI Web site. The raw data supporting these summaries has been provided to TNI to be published. They have done the statistical measure on the New Jersey three-year data set. He understands that the subcommittee is having difficulty assessing the economic impact of PTs. The group has also performed a comparison of international standards and how other countries are dealing with the issue of PT frequency. The ELAB will come to a final decision on the PT frequency issue by the end of the year.

6. PUBLIC DISCUSSION ON GENERAL ACCREDITATION, ANALYSIS TOPICS

Dr. Flowers stated that this meeting is the stakeholder community's opportunity to communicate issues to their government regarding laboratory issues. He invited the audience for public comment on any of the topics discussed thus far or any other related topic. The Board has received some of its best ideas from these sessions and community feedback is always appreciated.

A. SW-846 Method Discussions

Mr. Ron Turpin from Illinois EPA provided clarification to his previous comment about the benefit of EPA issued guidance about equivalency between versions of the same SW-846 method. He said that if the EPA guidance stated that the methods versions are exactly equivalent, that would be helpful to the regulators. If the guidance was not so direct it might help, if EPA could state that regulators who received and reviewed data from the most current method revision could assume equivalency with the regulatory mandated method.

Mr. Michael Miller, from MW Miller LLC, suggested that OSW should have a small paragraph in the method describing the changes from the previous version or a statement that the changes are editorial and the methods are equivalent. Unless a large change was made, this type of statement would take minimal space at the beginning of the document. This way, method users would not have to look in the docket or Federal Register to discover the changes from version to version. Some of these method changes do impact data and laboratories need to be able to find these important changes easily. Regulatory programs rely on the certification process to reduce the amount of review needed on a data package and the programs need to know when the data is equivalent from version to version.

Mr. Dechant had another question regarding SW-846. As background, the laboratory community expressed a consensus opinion that it would be to their advantage for EPA to promote or require using the most recent version of methods. However, in his discussions with the laboratories, few commercial laboratories are interested in implementing the latest version of Method 8330 on solids because of the sampling and subsampling requirements in the method. He asked how the laboratories were dealing with the implementation of this more time intensive and costly method. Mr. Larry Penfold from Test America replied that Method 8330b is not part of the 4th Edition of SW-846, but rather is a standalone method released in November 2006. Dr. Richard Burroughs from Test America stated that there are method updates that are more time-consuming and expensive than older versions, which is why laboratories need a consistent implementation date and a requirement to use the latest methods. Otherwise, laboratories will not use the newer methods. Laboratories assume method updates release methods that are "better" than the old version. It does not make sense to him that new methods are "equivalent" since they are improvements over the previous version.

Dr. Flowers stated that the issues with updates to SW-846 methods occurred over time and it will require a concerted effort over time to resolve the issues. There may not be a single solution that will completely address the issues. He added that the ELAB is committed to working on solutions and OSW participation at the meeting indicates that EPA would like to resolve the issues as well.

Mr. James Todaro from Alpha Analytical introduced another issue that reiterates the responsibility of the data users. He asked whether the end user understands what it means to their program when a method version is published. The laboratories can receive requests to perform three different versions due to permit or regulation requirements. It is important to have a plan to provide information to the State permit writers on the background and changes driving method updates. Permit writers need to understand the impact of the method revisions. Otherwise they will be unlikely to allow the newer versions and enforce using the older methods written into the permits.

Mr. Wyeth added that advocating new method versions alone is far from resolution of the issues. Without agreement from the States to incorporate this requirement into regulations, an EPA requirement to use the latest version of the methods could raise more problems than it solves. Dr. Flowers replied that when the OSW issues multiple method revisions over time with no connection or comparison to past methods, problems are caused. Connection to the past version of the method with an indication of the type and impact of the change is one of several important solutions to the issues. It would help the stakeholder community if the OSW can find a way to show the transformation of the methods as they are revised. Ms. Autry then stated that as the Board continues to talk to the OSW, the Board could consider input from the group of TNI State assessors about what they can do during accreditation while confirming to State regulatory requirements. The regulatory issues regarding accreditation to the methods required in permit seems to be the one of the major barriers to using new method versions.

Dr. Ken Jackson stated that many years ago he worked on the performance-based method system, which has since gone through various iterations of names. The standard is complete, although it was never adopted by NELAC. He added that if this system were adopted, then these discussions would not happen. Perhaps ELAB should put more effort into persuading the EPA offices to adopt this approach.

Ms. Autry replied that the EPA has a very solid commitment to working on the performance approach; the EPA Forum on Environmental Measurements (FEM) met with all of EPA's offices and established four goals to create flexibility in agency methods. EPA realized that a single approach to the performance approach would not work for all EPA offices. Once EPA came to this conclusion and agreed on four criteria to provide greater flexibility in methods, FEM could move ahead to write a Federal Register notice for release in the late-April that will announce EPA's flexible approach to environmental measurement. There are commitments from all four major programs to take steps towards greater method flexibility and quicker turnaround for method modifications. Any group that would like to work with the FEM on a pilot program to make sure the approach is providing the necessary flexibility should contact Ms. Autry

for more information. The new terminology for the performance approach is “Flexible Approaches to Environmental Measurement.”

B. PT Frequency Update Discussion

Mr. Gil Dichter from IDEXX Laboratories asked whether the PT survey was sorted based on major measurement areas like chemistry versus radio chemistry and microbiology. He noted that the data showed different trends in PT failures between the major analysis systems. Has ELAB evaluated whether one PT per year is sufficient for each of these different analysis systems? He also noted that there is a difference in cost to analyze PT samples between the major analysis systems. Has ELAB looked at the difference in cost to run a PT sample between these major systems or the effectiveness of running one versus two PT samples per year for each of these major systems?

Mr. Keith Dekle from Pinellas County replied that there should be good statistical comparisons to determine the number of PT samples per year. Personal opinions are not appropriate. Dr. Flowers replied that decisions are being based on statistical analysis which can be reviewed on the TNI Web site. Soon the raw data from the study will be available to allow stakeholders to perform their own analysis. Mr. Dechant also stated that if there is a statistical difference in data, does that difference pass the “so what” test. While there may be a statistical difference, that difference may not be enough to warrant more or less PT samples. It may be a question of doubling the cost to run PT samples compared to the benefit of these extra samples. Dr. Flowers asked whether a 10 percent difference worth twice the cost?

Mr. Ray Frederici from Test America asked how long data would be accepted from laboratories that fail PT samples? If a laboratory performs on PT every six months, theoretically a laboratory can be generating data for a full year before a second PT is failed and certification is revoked or suspended. When the PT frequency goes to a year, data could be failing for two years. If a laboratory is performing its method correctly, then once a year is fine, however if the method used is incorrect, more than one PT per year may be required to catch this error.

Mr. Wyeth then stated that the purpose of PTs is not to validate data quality; it is just one step in the accreditation process. There are on-site assessments, SOP reviews, and PT samples as parts in determining if a laboratory should be approved. Looking back at the drinking water standard that only requires one PT per year, there are remedial actions required when a PT fails. He agrees with Mr. Frederici that we do not want to wait two years for a laboratory to show that it can produce acceptable PT results. Also, question on PT frequency needs to stay with in the bounds of whether the laboratory should be accredited according to TNI standards.

Dr. Flowers commented on the data and that the statistics are mind-boggling. Mean recoveries for typical targets were identical between the two groups. ELAB’s course of action is to follow the issue as it develops and is waiting for the TNI PT frequency committee to complete their work evaluating data from the frequency studies, ELAB will

gather sufficient information to allow the Board to issue an opinion. The Board wants to reach out to all of the involved interest groups for their opinions, and welcomes others to perform analysis of the data to draw their own conclusions.

Regarding PT frequency, Mr. Todaro asked whether there is a resolution for laboratories with multiple States accreditation to the issue that some States certify to specific compounds and some certify based on a laboratory successfully analyzing a high percentage of analytes in a PT. Dr. Flowers indicated the question should be directed to the TNI PT committee that meets later in the week.

7. FEM & WORKGROUP UPDATES/ASSIGNMENTS (OLD AND NEW)

Dr. Flowers reviewed the function and purpose of subcommittee groups and introduced the subcommittee chairs.

A. FEM/ELAB Update

Ms. Autry, the designated federal official to ELAB, provided background on ELAB and interactions with EPA's Forum on Environmental Measurements (FEM). FEM consults with ELAB on multiple items on EPA's measurements related agenda. The FEM has been developing method validation guidelines and policy statements released by EPA's Science Policy Council to improve the agency methods. The FEM is working on the performance approach, method detection, calibration and quantitation issues. FEM is updating their Web site to provide information on FEM activities. FEM is taking method detection limit guidance developed for EPA's water programs by a separate Federal Advisory Committee and evaluate use of this approach across the Agency. This workgroup, representing all of EPA, has had great success with compiling a glossary and identifying similar terms associated with detection limit calculations throughout the agency as a first step to consolidate or narrow down guidance for calculation of detection limit. The workgroup found no single all-encompassing calculation, but will satisfy EPA's needs and they intend to produce a tool box with a single glossary describing how and when various detection limit calculations should be applied. Ms. Autry shared the workgroup's plan to present this "tool box" at the next National Environmental Monitoring Conference (NEMC) meeting in San Antonio Texas.

FEM is actively working on ways to promote a national laboratory accreditation. The group has successfully included language into a competitive contract that gives preference to accredited laboratories. This language has been circulated to all of EPA's offices. FEM is in the process of writing a policy statement so that all EPA programs requiring laboratory analysis use this language in their contract solicitations. EPA has a contract in place for external laboratory assessment to certify EPA laboratories if there is not an accreditation program for the type of work they perform. If accreditation is available for the type of work EPA laboratory performs, then they will be seeking this accreditation. In fact, all of EPA's regional laboratories have received NELAP accreditation.

The FEM is also working with the committee organizing the National Environmental Monitoring Conference (NEMC) in August. FEM plans to have a speaker at the conference to talk about the EPA's transition under the new administration and it is possible that the new EPA administrator will deliver this talk. In addition, the Science Policy Council (SPC) has expanded the FEM's agenda to include topics on better use of sensor technology in environmental monitoring programs. Sensor technology is the starting point for FEM to be engaged in advancing environmental monitoring.

Mr. Wyeth asked if either ELAB or the FEM were still involved in homeland security. Ms. Autry replied that FEM has never had a formal homeland security item on its list of agenda. She participates in calls with EPA's homeland security group in the event that there is an issue that the ELAB can support.

B. Monitoring Workgroup

As the chair of the monitoring workgroup, Ms. Morgan presented a summary of the Board's monitoring workgroup's three major assignments. The workgroup is beginning to look into data qualifiers and how this relates to having a nationally accepted system of data qualifiers and the possibility of applicable use of these qualifiers in the drinking water data in accepted circumstances. Another item on the workgroups agenda is hazardous waste in laboratories and how that relates to progress towards greening EPA laboratories. The workgroup also plans to revisit the idea of developing a methods collection Web site. The workgroup will revisit previous work to discuss outreach on the use of the Web site, as well as additions or updates to the information on the Web site.

C. Laboratory Management Workgroup

Mr. Dechant stated that at this time his workgroup's primary activity was the OW/TNI standard comparison paper.

D. Measurement & Technology Workgroup

There was no report from this workgroup because its chairman Mr. Lowry was not available via conference phone for this part of the meeting.

8. CLOSING REMARKS/ADJOURN

Dr. Flowers asked for additional questions and comments. Hearing none, he adjourned the meeting.

Attachment A

AGENDA
ENVIRONMENTAL LABORATORY ADVISORY BOARD
Monthly Teleconference: 866-299-3188/9195415544#
January 12, 2009; 1:30 - 5:00 pm (ET)

Opening Remarks	DFO/Chair
Roll Call of ELAB Members and Identification of Guests	Chair
Review/Approval of November Minutes	Chair
Implementation of SW-846 Update IVB	All
- ELAB Slide Presentation (Speis)	
- OSW Slide Presentation (Ms. Lee Hoffman & Ms. Kim Kirkland, OSW)	
Comparison of the TNI Accreditation Standard to the Drinking Water Certification Manual	Dechant
Frequency of Proficiency Testing	Morgan
Review ELAB Action Items and Assignments	Chair
Open Forum	All

MEMBERSHIP LISTING AND GUESTS

ELAB MEETING

December 17, 2008; 1:00 – 3:00 PM EDT

Attendance (Y/N)	Name	Affiliation
Y	Dr. Jeff Flowers (Chair)	City of Maitland Florida Representing: Elected Officials of Local Government
Y	Mr. David (Dave) N. Speis (Vice Chair)	Accutest Laboratories Representing: American Council of Independent Laboratories (ACIL)
Y	Ms. Lara P. Autry, DFO	US Environmental Protection Agency Representing: EPA
Y	Dr. Richard Burrows	Test America Inc. Representing: Large Commercial Lab 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)
Y	Dr. Reza Karimi	Battelle Memorial Institute Representing: Non-profit 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	Ms. Judith (Judy) R. Morgan	Environmental Science Corp. Representing: Commercial Env. Lab.
N	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
N	Dr. Jim Pletl	Hampton Roads Sanitation District Representing: Municipal Env. Lab.
N	Ms. Nan Thomey	Environmental Chemistry, Inc. Representing: Owners Full Service Labs
Y	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 (Guest)	Dr. Ray Merrill	Eastern Research Group (ERG)
Y (Guest)	Ms. Jennifer Colby	Eastern Research Group (ERG)
Y (Guest)	Ms. Lee Hofmann	Office of Solid Waste and Emergency Response (OSWER)
Y (Guest)	Ms. Kim Kirkland	Office of Solid Waste and Emergency Response (OSWER)
Y (Public commenter)	Mr. Joseph Aiello	New Jersey Department of Environmental Protection
Y (Public commenter)	Mr. George Kulasingam	California Department of Public Health
Y (Public commenter)	Mr. Ron Turpin	Illinois EPA
Y (Public commenter)	Mr. Steve Arms	Florida Department of Health
Y (Public commenter)	Ms. Brooke Conner	USGS
Y (Public commenter)	Mr. Larry Jackson	EQM, Inc.
Y (Public commenter)	Mr. Gil Dichter	IDEXX Laboratories
Y (Public commenter)	Mr. Keith Dekle	Pinellas County
Y (Public commenter)	Mr. Ray Frederici	Test America
Y (Public commenter)	Ms. Mitzi Miller	EQM, Inc.
Y (Public commenter)	Mr. Michael Miller	MW Miller Env. Analytical Chemist, LLC
Y (Public commenter)	Mr. James Todaro	Alpha Analytical

ACTION ITEMS

Attachment D

I hereby certify that these are the final version of minutes for the Environmental Laboratory Advisory Board Meeting held on January 12, 2009.



Signature Chairman

Dr. Jeff S. Flowers

Print Name Chairman