



# **THE INSTITUTE REVIEW**

First Quarter 2015



## **Table of Contents**

---

<b><u>Article</u></b>	<b><u>Page</u></b>
Environmental Measurement Symposium.....	1
Summary of the 2015 Methods Update Rule .....	3
2015 Board of Directors Election.....	6
TNI 2015 — 2020 Strategic Plan.....	7
Highlights of the 2015 Forum on Laboratory Accreditation .....	9
The 2015 Standard and SOP 2-100 for Standards Development.....	10
NEFAP Recognition Accepted by LELAP.....	12
Update: The Future of National Environmental Laboratory Accreditation.....	13
Summary of TNI NEFAP FSMO Program Changes from the 2007 Standard to the 2014 Standard .....	15
Website Update .....	20
Kentucky Begins Accreditation of FSMOs.....	21
Member Spotlight: Remembering Dr. Charlie Carter .....	22
Upcoming Meetings .....	24



## Environmental Measurement Symposium

By Lara Phelps, USEPA and Jerry Parr, TNI

For the ninth year, the Environmental Measurement Symposium, which represents the combined meetings of the National Environmental Monitoring Conference (NEMC) and the Forum on Laboratory Accreditation (the Forum), will be meeting at the Hyatt Regency in Chicago, IL from July 13 – 17, 2015. This year, the Symposium's theme is "**Big Data: Environmental Measurement and Monitoring Data in the 21st Century**".

Some of the highlights for the week include:

- ◆ A special half-day general session focused on the conference theme, featuring EPA Deputy Administrator Stan Meiburg and other key representatives from industry, academia, and a citizen community organization of emerging leaders;
- ◆ Over 175 oral and poster presentations on a variety of cutting-edge environmental monitoring issues;
- ◆ Meetings of The NELAC Institute (TNI) Committees to further TNI efforts on environmental laboratory accreditation, proficiency testing, and accreditation of field sampling and measurement organizations;
- ◆ An exhibit program showcasing the latest innovations in environmental monitoring;
- ◆ Three special keynote presentations on topics of general interest; and
- ◆ An open meeting of the US Environmental Protection Agency's (EPA's) Environmental Laboratory Advisory Board.



### Forum on Laboratory Accreditation

The NELAC Institute's (TNI's) semi-annual meeting is an integral part of the Environmental Measurement Symposium (Symposium). This article summarizes the meetings of TNI's four core programs. As these sessions become further developed, additional details will be available on the TNI website at <http://www.nelac-institute.org>.

#### Proficiency Testing Program: Tuesday, July 14

TNI's Proficiency Testing (PT) Executive Committee will have a session devoted to PT issues, including changes to the existing FoPT tables.

#### Consensus Standards Development Program: Monday – Thursday, July 13-16

The purpose of this program is to develop consensus standards for use by TNI's other programs. This program also has a support role in assisting other programs with activities such as guidance and standards interpretation. All of the Expert Committees in this program will be meeting in Chicago.

The Chemistry, Quality Systems, Microbiology, Proficiency Testing, and Radiochemistry Expert Committees are all at the final phases of adopting a new laboratory accreditation standard and their meetings will be focused on this effort.

The Laboratory Accreditation Body Committee will begin reviewing the 2009 Volume 2, Accreditation Body Standard, with a view to updating it. The committee will consider revising and consolidating Module 1 (General Requirements) with Module 3 (On-Site Assessment), since there presently is a tremendous overlap between the two modules.

The Stationary Source Audit Sample Committee will be discussing an update to Volume 1 Module 2 (General Requirements for an Accreditor of Stationary Source Audit Sample Providers).

This meeting will feature the first public meeting of the recently formed Whole Effluent Toxicity Expert Committee.



## Environmental Measurement Symposium cont.

### National Environmental Field Activities Program (NEFAP): Thursday, July 16

The NEFAP Executive Committee will meet on Monday afternoon with a session devoted to continued discussions for implementing an accreditation program for Field Sampling and Measurement Organizations (FSMOs), including implementing the recommendations in the 2015 TNI Strategic Plan.

### National Environmental Laboratory Accreditation Program (NELAP): Thursday, July 16

On Thursday morning, a joint session of the NELAP Accreditation Council and the Laboratory Accreditation System Executive Committee will be discussing plans for implementing the 2015 laboratory standard.

### National Environmental Monitoring Conference (NEMC)

The National Environmental Monitoring Conference (NEMC) provides the principal forum for addressing policy and technical issues affecting monitoring in all environmental media (i.e., water, air, soil, and waste) and across all environmental programs. NEMC is co-sponsored by The NELAC Institute (TNI) under a cooperative agreement with the U.S. Environmental Protection Agency (USEPA). The technical program is organized by a committee of environmental experts from government and private industry, which brings together a balance of technical and policy topics for each year's symposium that are of interest to all.

NEMC 2015 will feature over 175 oral and poster presentations organized into concurrent technical sessions from Monday through Thursday, with a general session on Wednesday morning. A keynote address on a major topic will kick-off the start of each day.

Technical Sessions for NEMC 2015 include:

- ◆ Academic Research Topics in Environmental Measurement & Monitoring
- ◆ Collaborative Efforts to Improve Environmental Monitoring
- ◆ Advances in Sample Preparation & Clean-up
- ◆ Contaminated Sediments
- ◆ Best Practices for Reference Materials
- ◆ Current Topics in Microbiology
- ◆ Data Quality
- ◆ Field Analytical Chemistry
- ◆ Forensic Chemistry
- ◆ High Performance Liquid Chromatography in Environmental Monitoring
- ◆ LIMS Implementation Issues
- ◆ Satisfying Method & Program Requirements to Comply with SDWA & CWA Regulations
- ◆ Method 8260 Productivity Forum
- ◆ The 2015 TNI Laboratory Standard
- ◆ Operational & Advocacy Issues Impacting the Environmental Laboratory Industry
- ◆ Topics in Drinking Water
- ◆ Solid Phase Extraction Comes of Age
- ◆ Topics in Shale Gas
- ◆ Changing the Paradigm for Water Pollution Monitoring

The Wednesday morning General Session will feature presentations regarding the conference theme – **Big Data: Environmental Measurement and Monitoring Data in the 21st Century.**

On Friday, there will be two training opportunities: *Sample Collection Design and Accreditation*; and *Corrective Action Process*, which is only a half (1/2) day. You must register to participate due to limited seating being available.

Please take a few minutes to look over the preliminary program and register today. To view abstracts and the preliminary program, in addition to conference arrangement details, visit <http://www.nemc.us>. We look forward to seeing you in July!!!



## Summary of the 2015 Methods Update Rule

By Jerry Parr, Catalyst Information Resources

On February 19, 2015, the EPA proposed to approve new methods, or changes to existing methods, that affects over 100 EPA methods, Standard Methods, ASTM methods, and other test procedures in 40 CFR Part 136. The rule also contains a number of clarifications relating to approved methods, sample preservation and holding times, and method modifications. Among the more significant changes are updated versions of Methods 608, 624, and 625, and revisions to the MDL procedure in Part 136. This article summarizes the proposed changes.

### Changes to Previously Approved EPA Methods

Methods 608, 624, and 625

- Substantive changes to both technology and QC. Some changes will be controversial to both labs and permittees.

Method 611

- EPA proposed to correct the analyte name for bis(2-chloroisopropyl)ether to 2,2'-oxybis(1-chloropropane), which matches the CAS Number 108-60-1.

Methods 1600, 1603, 1680, and 1682

- EPA proposed to correct minor typographical or other errors in methods 1600, 1603, 1680, and 1682 that EPA identified in the methods after publication.

### New Versions of Approved Standard Methods

The EPA proposed to approve new versions of the following currently approved Standard Methods:

9221 B, C, E, F-06	3500-Al B-11	4500-NO 2- B-11
9222 B, D, G-06	3500-As B-11	4500-NO3- D, E, F, H-11
9230 B, C-07	3500-Ca B-11	4500-Norg (B-D)-11
2120 B, F-11	3500-Cr B, C-11	4500-O B-G-11
2130 B-11	3500-Cu B, C-11	4500-P B (5), E-H-11
2310	3500-Mn B-11	4500 SO2-B-D, F, G-11
B-11	3500-Na B-11	5210 B-11
2320 B-11	3500-Pb B-11	5220 B, D-11
2340 B-11	3500-V B-11	5310 B, D-11
2340 C-11	3500-Zn B-11	5520 B, F-11
2510 B-11	4110 B-D-11	5530 B, D-10
2540 B, C, D, E, F-11	4140 B-2011	5540 C-11
2550 B-10	4500-B B-11	6200 B, C-11
3111 B, C, D, E-11	4500-Cl- B-G-11	6440 B-05
3112 B-11	4500-CN- B-G-11	6630 B, C-07
3113 B-10	4500-F- B-E-11	6640 B-06
3114 B, C-11	4500-NH3 B-H-11	
3125 B-11		

Note: EPA did not propose to approve method 6810 for the analysis of pharmaceutical and personal care products in water because no supporting data were received by the deadline to demonstrate that the method had undergone full inter-laboratory validation.

### New Versions of Approved ASTM Methods

EPA proposed to approve new versions of the following currently approved ASTM methods:



## Summary of the 2015 Methods Update Rule cont.

D 511 – 09 (A, B)	D 3223 -12
D 516 – 11	D 3373 – 12
D 858 – 12 (A – C)	D 3557 – 12 (A – D)
D 859 – 10	D 4382 – 12
D 1067 – 11	D 4658 – 09
D 1068 – 10 (A-C)	D 5257 – 11
D 1126 – 12	D 5673 – 10
D 1179 – 10	D 5907 – 13
D 1246 – 10	D 6508 – 10
D 1688 -12 (A - C)	D 7284 – 13
D 1691 – 12 (A, B)	D 7511 – 12
D 1976 – 12	D 7065 – 11

### New Methods

EPA proposed to add the following new methods:

- USGS Methods I-2547-11 and I-2548-11, Colorimetric Determination of Nitrate Plus Nitrite in Water by Enzymatic Reduction, Automated Discrete Analyzer Methods, for nitrate, nitrite, and combined nitrate-nitrite. Method I-2548-11 is a low level (analytical range) version of Method I- 2547-11;
- NECi Method N07-0003, Method for Nitrate Reductase Nitrate-Nitrogen Analysis;
- Timberline Instruments, LLC Method Ammonia- 001, Determination of Inorganic Ammonia by Continuous Flow Gas Diffusion and Conductivity Cell Analysis;
- IDEXX Laboratories, Inc. Colilert®-18, Coliform/E. coli Enzyme Substrate Test for fecal coliforms in Wastewater;
- NCASI Method TNTP-W10900, Total (Kjeldahl) Nitrogen and Total Phosphorus in Pulp and Paper Biologically Treated Effluent by Alkaline Persulfate Digestion;
- Hach Company Method 10242, Simplified Spectrophotometric Measurement of Total Kjeldahl Nitrogen in Water and Wastewater;
- Hach Company Method 10206, Spectrophotometric Measurement of Nitrate in Water and Wastewater.

### Changes to Appendix B to 40 CFR Part 136 - Definition and Procedure for the Determination of the MDL

EPA proposed revisions to the procedure for determination of the MDL primarily to address laboratory blank contamination and to better account for intra-laboratory variability. The proposed revisions address the following issues and would add new requirements:

- Laboratories would be required to evaluate the MDL to account for background levels of contamination.
- If a laboratory uses MDL values that represent multiple instruments, then the laboratory would be required to calculate the MDL using spiked samples and blank samples from all of these instruments.
- Laboratories would be required to check their MDL values once a quarter.

### Variances for Sample Preservation, Containers and Holding Times

EPA seeks comment on how to approve variances to sample preservation, containers or holding times listed in Table II for specific dischargers. Before the 2012 Final Method Update Rule, the regulation required parties requesting a variance to send the request to the appropriate EPA regional office for review, and then for the



## Summary of the 2015 Methods Update Rule cont.

regional office to send the request to the National ATP Coordinator at EPA Headquarters for review and recommendation. This change in the approval process resulted in the following potential complications and EPA is interested in public comment on them. First, it created a parallel authority to approve variances to Table II for specific dischargers. A discharger could make a request to both the Regional ATP Coordinator and the permitting authority, receive contradictory answers, and then choose the answer that the discharger prefers. Second, when there are different authorities approving a Table II variance for specific dischargers, there is potential for the data and documentation required by one authority to differ significantly from that required by the other authority.

### Clarifications/Corrections to ATP Procedures

Parts 136.4 and 136.5 describe EPA procedures for obtaining approval to use an alternate test procedure either on a national basis, or for limited use by dischargers or facilities specified in the approval. In the 2012 Method Update Rule, the EPA made several clarifying changes to the language of these sections. At the same time, however, in many places where the phrase “Regional Alternate Test Procedures Coordinator” or “Regional ATP Coordinator” appears, the EPA inadvertently also inserted the phrase “or permitting authority” following the phrase. The effect of the change was to inadvertently authorize State permitting authorities to approve ATPs for limited use within the State. The EPA never intended this. Consequently, the EPA proposed to delete all instances of “or permitting authority” to correct this error and revise the rule text to its original intent. Based on this revision, the EPA and the EPA alone would have the authority to approve limited use ATPs.

### Other Minor Changes

EPA proposed several other minor changes, including:

- clarifying the language on the term “Director,”
- deleting the words “be sufficiently sensitive and” to eliminate unnecessary confusion,
- make a number of clarifications and corrections to its Whole Effluent Toxicity acute and chronic methods manuals,
- change the Standard Method listed for E. coli most probable number (MPN) in Tables IA and IH,
- reinstate a line for Enterococci that was erroneously deleted in the 2012 Methods Update Rule,
- change one of the Table IB hardness entries,
- edit Table IB, footnote 52 to show that a 1999 version of Method 300.1 is approved,
- remove the reference to costs in 40 CFR 136.3,
- add rows to Table II that specify holding times for total/fecal coliforms, and fecal streptococci in Table IH,
- change the sodium thiosulfate concentrations in Table II for bacterial tests from 0.0008% sodium thiosulfate to 0.008%, and
- re-insert language that was accidentally deleted from footnote 5 of Table II.



## **2015 Board of Directors Election**

*By Steve Arms, Florida Department of Health*

Elections for the 2015 Board of Directors began on March 23 with the announcement of the slate of candidates on the TNI website. Nominations opened on March 2 to receive applications for candidates to fill 7 potential vacancies. The Bylaws allocate a Board of 10-18 members, so not all vacant slots need to be filled, but the Nominating Committee always seeks nominations from as large and diverse a cross-section of the TNI membership as possible. This year's election also included the ratification of ex-officio directors, who are now voting members of the Board. Balloting continued through April 1, with newly elected directors to assume office on April 8 during the Board's regularly scheduled monthly teleconference.

The Nominating Committee, which consists of Aurora Shields, Catherine Katsikis and Steve Arms, painstakingly reviewed the qualifications each nominee and assembled the ballot for voting by the TNI membership. Each one is eminently qualified to serve and willing to give of their time and talents to further the mission of TNI.

Directors need a broad understanding of issues facing TNI and must uphold the Institute's mission, goals, priorities, and Code of Ethical Conduct. Each must demonstrate a commitment to TNI's priority to be a highly functioning organization committed to balance and inclusion. Directors must have strong interpersonal skills and be able to objectively consider various perspectives while making major policy decisions.

<b>2015 TNI Board of Directors</b>	
Jordon Adelson	US Navy NAVSEA Programs Field Office
Aaren Alger (Vice Chair)	Pennsylvania DEP
Steve Arms	Florida Department of Health
Justin Brown	Environmental Monitoring and Technologies
Scot Cocanour	Promium LLC
George Detsis	US DOE
Zonetta English	Louisville Jefferson Co., MSD
Jack Farrell	Analytical Excellence, Inc.
Keith Greenaway	ANAB
Myron Gunsalus	Kansas DHE
Sharon Mertens (Chair)	Milwaukee Metropolitan Sewerage District
Judy Morgan	ESC Lab Sciences
Lara Phelps	USEPA / OSA
Patsy Root	IDEXX Laboratories
Scott Siders	Illinois EPA
Alfredo Sotomajor (Secretary)	Milwaukee Metropolitan Sewerage District
David Speis (Treasurer)	QC Laboratories
Elizabeth Turner	North Texas Municipal Water District



## TNI 2015 — 2020 Strategic Plan

By Sharon Mertens, Milwaukee MSD and  
Chair, TNI Board of Directors

The TNI Board of Directors approved a strategic plan for the organization in March. As reported in the last newsletter, this process was led by the Board, but program chairs and staff provided a great deal of input as well. Strategic planning is a systematic process through which an organization agrees on priorities which are essential to its mission. Successful strategic planning relies on building commitment among key stakeholders and monitoring and evaluating the organization's progress. It is about long term growth and direction. The purpose of this follow up article is to give you a brief overview of each of the strategies and goals contained in the strategic plan. The complete plan can be found on the [TNI website](#) under News.

This is a five (5) year plan, spanning 2015-2020. It contains three (3) main strategies and each of those strategies has goals, objectives, assignments, and priorities or due dates.

The plan starts with our mission and vision statements. The meanings of these are not significantly different than they have been in the past, but they were reworded to reflect the leadership role that we want to have in environmental testing. While not explicitly stated, the overall theme of the strategic planning process was to have the TNI Standard be the "gold standard" for environmental analysis – including field, lab and related areas.

### Our Mission

*To be the leader in providing systems and processes to foster the generation of environmental data of known and documented quality through an open, inclusive, and transparent process that is responsive to the needs of the community.*

### Our Vision

*All entities generating environmental data will be uniformly accredited to the TNI standards.*

**Strategy 1 is to establish and maintain national programs for the accreditation of environmental laboratories, field sampling and measurement organizations, and other organizations directly involved in the generation of environmental monitoring data.** This strategy reaffirms that what we have done since our inception will be key to what we continue to do in the future. The goals in this strategy pertain to our standards and our programs.

- ◆ Goal 1 is to ensure that TNI accreditation standards are used universally and are developed or revised as needed in an efficient process. Most of the objectives in this goal are assigned to the Consensus Standards Development Program. They include expanding the TNI laboratory standards by looking at whole effluent toxicity (now a new expert committee) and asbestos. Of course, the TNI standards will continue to be reviewed and modified as appropriate, with the goal of a 5-year cycle for future standards. Other objectives address wider acceptance and use of the standard.
- ◆ Goal 2 is to maintain and expand an effective national program for the environmental laboratories. Most of the objectives in this goal pertain to the ongoing work of the NELAP AC and the tools and processes they are developing to improve their program. An example of this is the development of the schedule for implementation of the 2015 Standard.
- ◆ Goal 3 is to maintain and expand the PT program. Included in these objectives is a plan to develop a better process for getting data to set acceptance limits and handle complaints.



**TNI 2015 — 2020 Strategic Plan cont.**

- ◆ Goal 4, the last in this strategy, is to ensure that standards are developed or revised as they are needed, in an efficient process. This includes the content (adding WET, for example) and the process (making better use of technology in our standards development).

**Strategy 2 is to brand TNI as the resource for all activities related to generating environmental measurement data.** At the heart of the goals and objectives in this strategy is to increase our outreach, develop the demand for both the TNI standards and increase our visibility.

- ◆ Goal 1, to provide assistance and incentives to stakeholders to enable and encourage them to participate, focuses on objectives to assist current stakeholders and expand our pool of volunteers.
- ◆ Goal 2 is to promote the benefits of accreditation to stakeholders, advocate for stronger support of accreditation from data users, and persuade data users to make accreditation mandatory. The objectives in this goal include development of a marketing plan for TNI and provide wider dissemination of information about accreditation, TNI and current topics to not only stakeholders, but individuals and groups beyond the current TNI Standard users.
- ◆ Goal 3 is to provide conferences that are beneficial to the environmental community, enhance TNI's mission and contribute resources to support TNI's programs. We will continue to hold the two national meetings that have been at the heart of our activities – the semi-annual Forum on Laboratory Accreditation and co-sponsor of the NEMC.
- ◆ Goal 4 is to establish TNI as the go-to organization for training in environmental measurement. We have seen a significant expansion in training through webinars and webcasts in the past couple of years and you can expect to see more of that, along with other training avenues, in the future.
- ◆ Goal 5 is to use technology to make our processes more effective and efficient. If you haven't seen our updated website lately – check it out! We will continue to improve the design of the website and will expand into social media to better use technology to support our products and services.

**Strategy 3 is to improve infrastructure to ensure TNI's future success and financial stability.** The titles of these goals speak for themselves, but they are important aspects for us to focus on to ensure organizational health in the coming years. They are:

- ◆ Goal 1 – Create a succession plan for sustainability;
- ◆ Goal 2 – Develop and maintain an effective management system;
- ◆ Goal 3 – Increase the operational and management efficiency and effectiveness of TNI, and;
- ◆ Goal 4 – Acquire stable, long term financial resources to support TNI programs and their growth.

If this sounds like an ambitious plan – it is! But most of the initiatives in this plan are already underway or in our current plans. There are now more ways than ever to volunteer to help us achieve our goals and we are committed to continuing to develop and improve our communications to keep you informed of the progress. Drop us a note if you want to join a committee or help out in some other ways. This is important work, but I promise we'll have fun in the process. Speaking for myself and for the TNI Board and staff, we look forward to working with you to achieve our vision.



## Highlights for the 2015 Forum on Laboratory Accreditation

By Jerry Parr, TNI

Over 200 people attended the Forum on Laboratory Accreditation in Crystal City, Virginia, at the location where this effort started 20 years ago. The highlight for many of us was the walk down memory lane on Monday morning. This session was recorded and the videos can be viewed on the TNI website under the link to this meeting.

This article summarizes several meetings that are not otherwise discussed in this issue of The Institute Review.

**Consensus Standards Development Program.** Meetings this week were very successful. Many committees are working through comments in order to finish everything that can be done effectively for the 2015 Laboratory Standard. One more exciting item – a new expert committee for Whole Effluent Toxicity testing was created.

**Proficiency Testing Program.** Discussed mainly Standard Interpretation Requests (SIRs). The program needed to talk with the Accreditation Council with lots of discussions and resolutions to present to the committee. PTOF table concerns should be resolved soon. Subcommittee members are being added and more are still needed, including a chair for the SOP subcommittee. The PTP and PTPA held meetings in January regarding the gathering of data in order to have enough or sufficient data concentration ranges and acceptance data, and to address concerns and complaints that are received regularly.

**Stationary Source Audit Sample Committee.** This meeting was spent working on the missed sulfurite acid audit sample because of uncharacteristic high failure rates. The new committee chair is Tom Widera from ERA. Volumes 1 and 3 have been through the VDS without any comments so we can go to final standard now.

**National Environmental Laboratory Accreditation Program.** The Accreditation Council met with the EPA Office of Water to discuss expectations of the EPA Drinking Water program on states. They discussed ways to make the EPA course more accessible to all assessors. The AC believes there are a lot of operating policies (twenty) that may need work and prioritized the top five. The Laboratory Accreditation System Executive Committee (LASEC) discussed what “suitability” actually means and came up with bullet points that will help the standards review process.

**National Environmental Field Activities Program.** The big topic was advocacy, how to let people know the NEFAP Standard is out there and can be used to demonstrate competency, and how to get the users back to these meetings. Great suggestions from FSMOs, including changes to the website. The committee had a discussion on the mobile lab and there is a survey being developed for that issue.

**Advocacy Committee.** The committee recapped what had been heard through the week and tasks that the Advocacy Committee should be involved with. An AB that we hope can apply soon, California is actively working to revamp their accreditation system — TNI will have a part in that as well. Trade associations (ACIL) would like to be more involved in a symbiotic relationship with TNI and those organizations. Most of the time was spent working on the tasks we have been assigned as a result of the October 2014 Strategic Planning Meeting – 14 different objectives, primarily under outreach goals. We have made significant inroads into this.

**IT Committee.** This was the best meeting we ever had. Thank you to everyone that came and gave feedback. We are very close to launching a different look to the website that everyone will like a lot. The main change is in the navigation - you can get to what you want a whole lot quicker. Thanks to William Daystrom for a tremendous job there. We have a little more clean up to do, and in a week or two will go live. Please provide comments. We also discussed LAMS, the General Application, methods, and analyte codes. There has been great progress on the methods compendium. Labs and lab assessors should be able to link to any method in our database. Progress on the General Application is slow and we should have more to report in Chicago.



## **The 2015 Standard and SOP 2-100 for Standards Development**

*By Bob Wyeth, Pace Analytical Services (retired) and Ken Jackson, TNI*

Efforts to develop a national environmental laboratory accreditation program have been on-going since and before the establishment of The NELAC Institute (TNI). Literally hundreds of volunteers from laboratories, accreditation bodies at multiple levels of government, consultants and other interested parties have contributed countless hours toward attaining the goals and objectives of TNI. To all these volunteers a tremendous debt of gratitude is owed.

At the heart of this effort is the development and refining of standards to which all participants are held and monitored for compliance. These standards are developed and modified as necessary by expert committees (EC) and supported by various executive and administrative committees and the Board of Directors (BoD). These EC's are formulated as needed to address the needs of the overall environmental community. Currently the EC's of TNI consist of the following...

- Quality Systems
- Field Activities
- Microbiology
- Chemistry
- Laboratory Proficiency Testing
- Laboratory Accreditation Body
- Radiochemistry
- Stationary Source Audit Sample

...as well as a newly formed group representing Whole Effluent Toxicity. Each EC is made up of volunteers from laboratories, accreditation bodies and other interested stakeholders. Balance on these committees is maintained through a lack of dominance by any one group. The activities of the EC's are coordinated by the Consensus Standards Development Executive Committee (CSDEC). The latter group is constituted of each EC Chair and 3 at-large members.

The standards development and/or modification process is completed through adherence to SOP 2-100; "Procedures Governing Standard Development". This SOP as Revision 1.1 has been in effect since 2010. The process as it evolved included the production of a Working Draft Standard (WDS), a Voting Draft Standard (VDS), and an Interim Standard (IS) introduced in a later revision of the SOP.

Several ECs are working diligently towards the development of the 2015 TNI Standard, which will replace the current 2009 Environmental Sector Standard. Some parts of the old standard will be unchanged, but much will be new standards. The biggest change will be in Proficiency Testing (PT), with all four (4) Volumes and Modules being re-written. The PT Expert Committee (PTEC) has presented as VDS Volume 1 Module 1 (laboratory requirements) and Volume 2 Module 2 (accreditation body requirements). Both volumes passed the voting, are currently being modified in response to voters' persuasive comments, and they will soon be offered as ISs. The Chemistry Committee has modified the calibration sections of Volume 1 Module 4 (laboratory chemistry requirements) and this has passed all the voting steps to be soon published as a TNI Standard. The Chemistry committee is currently working on the detection/quantitation sections of that module and will offer it to the membership as a VDS. The Microbiology and Radiochemistry committees are preparing VDSs of Volume 1 Module 5 and Volume 1 Module 6, respectively. The 2015 Standard will also include all Volume 1 modules of the Quality System Standard that was developed in 2012, but not yet adopted. Finally, the Quality Systems EC has recently published on the TNI website a WDS of just one section of Volume 1 Module 1 (laboratory quality systems general requirements) to correct an inconsistency with the proposed new microbiology standard.

The current process in SOP 2-100 requires numerous interactions with the public and TNI members with frequent modifications in each phase of development. The consequences are publications of modified renditions of the proposed standard (i.e., MWDS, MVDS, and MIS). The overall process has been frequently misunderstood, confusing, overly time-consuming, and arduous.



**The 2015 Standard and SOP 2-100 for Standards Development cont.**

---

SOP 2-100 has recently been revised to address these issues and to hasten the overall development process, while insuring wider and timelier participation by members of TNI, particularly those stakeholders who must implement the standards (i.e., laboratories and accreditation bodies).

The CSDEC's evaluation of the entire process, with the input of a BOD-appointed Task Force, determined that the most important element of the process was to establish a mechanism for much greater "up-front" communication and dialogue between TNI stakeholders and ECs. Revision 2 of this SOP has been approved by the CSDEC, the Policy Committee, and the BOD.

In order to accomplish this enhanced communication to hasten approval and the ability to implement the new standard or modification to the standard, SOP 2-100 Revision 2 includes a number of additional steps. Whenever a standard is to be developed or modified, the applicable EC will publicize, on the TNI website, the nature of the new standard or modification, justification for the inclusion or change, the need for the inclusion or change, and the benefits of its implementation. Through the website and other forms of communication all stakeholders and those directly affected will be solicited for comments and suggestions.

Having received this input, the EC will begin the development process by producing a VDS. The WDS phase of previous standard development has been eliminated from the SOP. When the EC has released the VDS it will be published on the website and a forty-five (45) day voting period will begin. As has always been the case, all comments will be addressed in open forum and responded to by the EC, including the production of a written Response to Comment document available to all interested parties.

Another addition to the SOP is the introduction of the Standards Review Council (SRC). The SRC is composed of expert committee members, accreditation bodies and other volunteers knowledgeable of the TNI Standard. The primary purpose of the SRC is to identify any conflicts with the VDS and any other parts of the Standard. The SRC initiates its activity upon publication of the VDS phase of standards development.

If the VDS receives no persuasive comments, the VDS may move directly to inclusion as a part of the TNI Standard. Persuasive comments will move the VDS to a Modified VDS phase and ultimately, to the IS phase where again, if no persuasive comments are received, the IS then becomes part of the TNI Standard. If, at the IS phase, persuasive comments are received, a Modified IS will be developed. When all comments have been resolved, the Modified IS will become a part of the TNI Standard.

SOP 2-100 Revision 2 will be published on the TNI website and all TNI members and interested parties are invited to familiarize themselves with the process now in place. Regardless of all the energies expended in preparing this new process, if stakeholders neglect to read and comment in a timely fashion on proposals to change the Standard, VDS or IS documents the process will continue to be problematic and implementation will be delayed.



## **NEFAP Recognition Accepted by LELAP**

*By Marlene Moore, Advanced Systems, Inc.*

---

In the Louisiana Department of Environmental Quality e-Newsletter Communication from the Louisiana Environmental Laboratory Accreditation Program of March 2015 to October 2015, the following information is presented:

“MOBILE LABORATORY ACCREDITATION — LELAP will recognize third party accreditation for stack testing based on the Louisiana administrative code or the 2009 TNI standard, Field Sampling and Measurement Organization sector.”

In an earlier publication from October 2014 to March 2015, LELAP indicated the following: “MOBILE — LELAP offers state accreditation for non-instrumental sampling activities. The accreditation type for laboratory work performed by the stack tester may either be state or NELAP. LELAP offers both NELAP and state accreditation for instrumental methods. LELAP will recognize third body accreditation for stack testing based on the Louisiana Administrative Code or the 2009 TNI standard [corrected to 2008 TNI FSMO Standard 4/10/15], field sampling and measurement organization sector.”

This recognition by Louisiana is the acceptance of third-party accreditation bodies that meet the requirements of the TNI Field Activities Standards Volume 1 and 2 and also follow the TNI Environmental Laboratory program 2009 TNI Standard or LAC requirements as part of the assessment process. This is more specifically detailed in the SES newsletter article from July to September 2013.

“In 2009, LELAP joined the other members of the National Environmental Laboratory Accreditation Program Accreditation Council (NELAP AC) in approving The NELAC Institute standard (2009 TNI standard [corrected to 2008 TNI FSMO Standard 4/10/15]) which includes a Field Sampling and Measurement Organizations Sector with separate volumes for field sampling and measuring organizations and accreditation bodies for those organizations. LELAP has implemented the environmental sector of the 2009 standard. At this time approximately forty facilities which sample and/or analyze stack and engine emissions or ambient air have been granted primary accreditation by LELAP according to the LAC for either sampling and/or analytical work or according to the 2009 TNI standard for analytical work. Secondary accreditation is offered to applicants that submit documentation of primary accreditation granted by agencies recognized by the NELAP AC or by non-governmental organizations recognized by the National Environmental Field Accreditation Program Executive Council (NEFAP EC). The recognized accreditation must be based on either the LAC or the 2009 TNI standard. Interim primary accreditation, which allows a facility to submit data to LDEQ before an assessment is completed, is granted on a case-by-case basis to facilities which submit a complete application that includes but is not limited to quality assurance manuals, proficiency tests and/or annual data packages, and certification of compliance.”

For further information on the NEFAP recognition process and Field Activities standard, please go to the TNI website ([www.nelac-institute.org](http://www.nelac-institute.org)).



## Update: The Future of National Environmental Laboratory Accreditation

By Carol Batterton, TNI

In response to communication between the Environmental Laboratory Advisory Board (ELAB) and the Environmental Protection Agency's (EPA) Forum on Environmental Measurement (FEM) regarding the future of national environmental laboratory accreditation, The NELAC Institute's (TNI) Board of Directors asked TNI's Advocacy Committee to review the status of national environmental laboratory accreditation to determine if a change in approach was needed to expand the program. The Advocacy Committee collected input from states not currently participating in national accreditation (non-NELAP states) as well as accredited laboratories and other stakeholders in order to get their perceptions about national accreditation and determine what barriers and issues exist today. Using the input collected from stakeholders, TNI sponsored a workshop on August 8, 2014, to brainstorm solutions to the barriers and issues identified.

Based on the feedback from the non-NELAP states and other stakeholders, the issues and barriers roughly fell into three categories: 1) technical issues related to the standards, 2) communication and outreach, and 3) state/EPA roles and involvement. In evaluating the input received, it was evident in several areas that participants had outdated information or misperceptions about how TNI and national accreditation currently operate. Some examples include: the level of EPA's current involvement, a belief that the quality systems approach and method-based approach are mutually exclusive, and a belief that the standards still changed frequently. As one commenter correctly noted, a number of the issues and barriers identified are outside of TNI's ability to control. However, there are a number of beliefs and perceptions, as well as technical needs, that TNI can address.

The TNI Board of Directors considered the issues and suggested solutions identified by workshop participants at their strategic planning meeting in October 2014. At their Board meeting on March 11, 2015, the TNI Board voted to include the following objectives in their 2015-2020 strategic plan as a direct outcome of this project.

### Technical Issues

- ◆ Implement an effective program to recognize non-governmental ABs to grant accreditations to the TNI Standard.
- ◆ Develop and make available a generic application form for laboratories.
- ◆ Develop and maintain a Methods Compendium for use by assessors and laboratories.
- ◆ Work with the EPA Office of Water to ensure that the TNI laboratory accreditation standard is deemed "equally effective" to the Drinking Water Certification Manual (DWCM).
- ◆ Monitor changes to the DWCM.
- ◆ Develop a document that summarizes the differences and similarities of the TNI and EPA Drinking Water programs. (Distill down from the crosswalk.)
- ◆ Effectively use the Small Laboratory Advocacy Group (SLAG) to engage small laboratories and to disseminate information to small laboratories.
- ◆ Develop and implement a comprehensive training program for stakeholders.

### Communication and Outreach

- ◆ Develop a long range plan for promoting and marketing accreditation to data users.
- ◆ Form Marketing and Outreach subcommittees under the Advocacy Committee to identify opportunities to promote TNI.
- ◆ Develop a "State of National Accreditation" report every two (2) years and offer briefings to EPA Regional Science and Technology Directors and the Forum on Environmental Measurement.
- ◆ Meet periodically with EPA program offices (e.g., Air, Solid Waste, and Wastewater), other federal agencies, state agencies, trade associations, other data users, and FSMOs to promote TNI and to better understand their needs for reliable environmental data, and work to ensure the TNI program meets the needs of all data users.
- ◆ Continue to conduct Assessment Forums to disseminate information. Make Assessment Forums more widely available through webinars.



**Update: The Future of National Environmental Laboratory Accreditation cont.**

---

- ◆ Consistently have a seminar at NEMC to introduce newly accredited laboratories to TNI.
- ◆ Explore opportunities for working cooperatively with other organizations to hold other regional conferences and workshops.
- ◆ Redesign the website for marketing, outreach, and technical assistance while maintaining key information for TNI members.

**State/EPA Roles and Involvement**

- ◆ Work to encourage NELAP and other ABs to accept the accreditations granted by NGABs.
- ◆ Expand outreach to non-NELAP states.
- ◆ Share the “State of National Accreditation” briefing noted above with assessors.
- ◆ Assign a TNI ambassador to every non-NELAP state; identify current barriers.
- ◆ Offer one free, non-voting membership to the certification manager or his/her designee of every non-NELAP state.
- ◆ Develop and offer a free webinar to introduce TNI and highlight the benefits of recognition, to expand communication on the TNI Standard as the ‘gold standard,’ and to explain what NELAP is today.
- ◆ Promote the EPA laboratory competency policy required for grants, EPA cooperative agreements, and contracts, and show how TNI’s accreditation programs are an effective way to demonstrate compliance with this policy.

While some specific barriers to expansion of national accreditation were identified, some stakeholders also noted a number of positive aspects to the current program. With regard to the standards, they stated that the current national standards were robust and created a benchmark for laboratories. There is a perception that being accredited to the TNI Standard gives laboratories credibility in court and has raised the bar in terms of what to expect from an analytical laboratory. Reciprocity and the PT program were also cited as positive aspects to the current approach.

Other positive aspects identified were increased dialogue among states and the laboratory community. In particular, TNI’s annual meetings and assessor forums were noted as opportunities for communication. Others commented that TNI’s training opportunities made it easier to stay up to date on changes to the standards and regulatory compliance issues. Services like these provided by TNI have allowed states to reap benefits from the national accreditation program even though they do not participate as NELAP ABs.



## Summary of TNI NEFAP FSMO Program Changes from the 2007 Standard to the 2014 Standard

*By Kim Watson, NEFAP EC Chair*

The TNI – NEFAP Field Activities Committee and the NEFAP EC approved updates to the TNI-NEFAP Standards Volumes 1 and 2 (FSMO-VI-ISO 2014-Rev2.0 and FSMO-V2-ISO-2014-Rev.2.0) in 2014. Changes to the Standard from the 2007 Standard that was voted on and approved in 2012 were not substantial in nature, but rather revised to add clarity for Field Sampling and Measurement Organizations (FSMOs) accredited and to the accreditation bodies performing the accreditations. These Standards will be effective April 2016.

A complete summary with all the changes in the wording and exact language can be found on the TNI Website under the document “Summary of TNI NEFAP FSMO Program Changes From the 2007 Standard to the 2014 Standard” (Rev Date: January 30, 2015). Below is a brief summary of the changes and sections that were revised:

### Volume 1 Changes:

- In Section 4.2.8: The 2nd and 3rd sentences were reworded for clarification.
  - Section 4.2.8 stated: The FSMO shall establish and maintain data integrity procedures, which shall be defined or referenced in the quality manual. The term “data” used in the clause refers to field measurement data and all other recording keeping. The data integrity that documents field sampling and measurement activities shall provide assurance that a highly ethical approach to field sampling and measurement is a key component of all FSMO planning, training, and method implementation. The data integrity procedures shall include provisions for the following:
- In Section 4.2.8: Sections (e), (f), and (g) were added, including provisions to be in data integrity procedures.
  - Section (e): The data integrity procedures shall be signed and dated by senior management.
  - Section (f): The data integrity procedures and the associated implementation records shall be properly maintained.
  - Section (g): The data integrity procedures shall be reviewed annually and updated by management as needed.
- In Section 4.5.5: The entire section was added to clarify “competent subcontractors”.
  - A competent subcontractor is one, for example, that complies with this TNI Standard for the work in question.
- In Section 4.13.1.4.3: The entire section was removed.
- In Section 4.13.2.1.2: The last sentence on “long duration projects” was removed.
- In Section 4.15.1: Note 4 was removed.
- In Section 5.2.2.2 (b): The reference to the four (4) elements of the data integrity system and the following four (4) bullets, as well as subsections i., ii., and iii.
  - Reference stated: There are four (4) required elements within a data integrity system.
  - Bullet 1 stated: Data integrity training.
  - Bullet 2 stated: Signed data integrity documentation for all FSMO employees.
  - Bullet 3 stated: In-depth, periodic monitoring of data integrity issues with confidential reporting of issues to management.
  - Bullet 4 stated: Data integrity procedures documentation.
  - Subsection i stated: The data integrity procedures shall be signed and dated by senior management.



## Summary of TNI NEFAP FSMO Program Changes from the 2007 Standard to the 2014 Standard cont.

- Subsection ii stated: These procedures and the associated implementation records shall be properly maintained.
- Subsection iii stated: The data integrity procedures shall be annually reviewed and updated by management.
- In Section 5.3.3: A note was added for avoiding conditions that could affect results.
  - The note states: During field tests and while handling samples, personnel should avoid areas where activities or conditions may adversely affect results, such as temporarily storing samples near volatile liquids or transporting test items between areas of high temperature contrast.
- In Section 5.3.6: This entire section, including the note, was removed.
- In Section 5.6.2.1.4: Letter (f) and letter (g) were added.
  - Letter (f) states: Data associated with an unacceptable initial or continuing instrument/equipment calibration shall be reported with appropriate data qualifiers.
  - Letter (g) states: Records of reference standard used for calibrations and reference material certificates shall be retained.
- In Section 5.6.2.2: Section 5.6.2.2.1 and its note, as well as Section 5.6.2.2.2, were added to provide ISO language that was previously missing.
  - Section 5.6.2.2.1 states: For testing laboratories, the requirements given in 5.6.2.1 apply for measuring and test equipment with measuring functions used, unless it has been established that the associated contribution from the calibration contributes little to the total uncertainty of the test result. When this situation arises, the laboratory shall ensure that the equipment used can provide the uncertainty of measurement needed.
  - The note states: The extent to which the requirements in 5.6.2.1 should be followed depends on the relative contribution of the calibration uncertainty to the total uncertainty. If calibration is the dominant factor, the requirements should be strictly followed.
  - Section 5.6.2.2.2 states: Where traceability of measurements to SI units is not possible and/or not relevant, the same requirements for traceability to, for example, certified reference materials, agreed methods and/or consensus standards, are required as for calibration laboratories (see 5.6.2.1.2).
- In Section 5.9.1: Letter (f) was added.
  - Letter (f) states: Verification of a measurement calibration using a second source.
- In Section 5.9.2: The previous wording for 5.9.2 was moved into 5.9.3, then new language was added in 5.9.2 on proficiency testing.

### Volume 2 Changes:

- In Section 4.2.5: Letter (g) was removed.
- In Section 4.3.7.1: Section 4.3.7.1, including letters (a), (b), and (c), were removed.
- In Section 4.5.1: Both Note 1 and Note 2 were removed.
  - Note 1 stated: A government accreditation body shall have the same arrangements to cover liabilities and workman's compensation claims arising from its operations and activities as all other programs, units, divisions, bureaus, etc., in the department or agency in which the accreditation body is located.



**Summary of TNI NEFAP FSMO Program Changes from the 2007 Standard to the 2014 Standard cont.**

---

- Note 2 stated: A non-government accreditation body shall have appropriate coverage for liabilities and workman's compensation claims arising from its accreditation activities.
- In Section 5.2.2: A note was added.
  - The note states: The requirements within TNI Standard "General Requirements for Field Sampling and Measurement Organizations", Volume 1, and ISO/IEC 17025 or ISO 9001 could serve as the basis for a quality manual.
- In Section 5.2.4: The entire section, including the note, was removed.
- In Section 5.4.3: This entire section was deleted, including bullets (a) and (b).
- In Section 5.4.4: This entire section was deleted, including bullets (a) and (b).
- In Section 5.7.1.2: This entire section was removed.
- In Section 5.8.2: Letter (m) was added.
  - Letter (m) states: Proficiency Testing Program.
- In Section 6.1.1.1: This entire section was removed.
- In Section 6.2.6.1: Added bullet iv.
  - Bullet iv states: Be judged proficient by the accreditation body.
- In Section 6.2.6.1: Letters (b) and (c) were removed along with the associated subsections.
- In Section 6.2.6.2, Note 1: The reference toward the specific program was removed.
- In Section 7.1.3.1: Minor grammar changes and references to the specific program were removed.
- In Section 7.1.3.2.1: A section on scope was added.
  - Section 7.1.3.2.1 states: Accreditation shall be granted for Field Sampling by Matrix/Technology, and/or for Field Measurements by Matrix/Technology.
  - Section 7.1.3.2.1 Note states: Accreditation may also be granted for Field Sampling/Measurement Methods, or analyte as specific to regulatory programs.
- In Section 7.1.3.2.2: The entire section was added to replace the above changes.
  - Section 7.1.3.2.2 states: The accreditation body shall make publicly available a list of scopes they are competent to assess.
  - Section 7.1.3.2.2 stated: Accreditation may be granted by Matrix (either sampling or measurement) such as: air matrices (ambient, indoor, outdoor air, point source and fugitive emissions, soil atmospheres, air monitoring, and continuous emissions monitoring); solids, including soil, sediment, sludge, and solids monitoring; water, including surface, waste, drinking, and groundwater; and biological samples, including, for example, whole animals, fish, shell, animal or plant tissue, and microorganisms.
  - Section 7.1.3.2.2 Note stated: Accreditation may also be granted by Field Sampling/Measurement methods or analyte/analyte group as specific to those programs defined previously under "Types of FSMOs" and "Types of Matrices".



**Summary of TNI NEFAP FSMO Program Changes from the 2007 Standard to the 2014 Standard cont.**

---

- In Section 7.2.1.1.1: Letter (d) and bullet (i) were reworded, bullet (ii) was deleted, numbers 1 and 2 (subsets of bullet iii) were deleted, letter (h) was deleted, letter (i) was deleted, and letter (k) was reworded.
  - Letter (d) stated: a scope of accreditation including.
  - Bullet (i) stated: field sampling and field analytical methods for which accreditation is being requested.
  - Bullet (ii) stated: a complete listing of sampling and measurement methods employed, including analytes to be; and.
  - Number 1 stated: The accreditation body shall have in place a procedure for mutually selecting and agreeing, with the FSMO, the field sampling and measurement locations and sampling/measurement personnel for observations in accordance with the scope of the requested accreditation.
  - Number 2 stated: The accreditation body shall have in place a procedure for selecting field sampling and measurement locations that provide a representative sampling of such locations and a representative sampling across field sampling and analytical methods and FSMO locations, such that all activities are assessed within an agreed timeframe not to exceed three (3) accreditation cycles.
  - Letter (h) stated: job description summaries of management and supervisory positions responsible for field sampling and measurement activities, with reporting relationships between positions.
  - Letter (i) stated: job description summaries of field sampling and measurement positions, with reporting relationships between positions.
  - Letter (k) stated: copies of the results of the previous three (3) proficiency testing samples/programs if applicable.
  
- In Section 7.7.5: Letter (l) was added.
  - Letter (l) states: Proficiency Monitoring Plan, which describes how the FSMO will demonstrate and/or measure proficiency, and shall include any available records.
  
- In Section 7.8.1.1: Language was added to letter (a); minor changes were made to the note; minor changes were made to letter (b); letter (c) was reworded for clarity; and letter (e) was deleted.
  - Letter (a) states: The assessment team shall use specific documentation in its reporting of deficiencies (e.g., a checklist). All deficiencies shall include a specific reference(s) to a clause in the relevant assessment standards, a clause in a method, a section or clause in the FSMO's own management system documentation, or to an accreditation body's own policies/procedures.
  - The note stated: The issues under i and ii above, at the discretion of the accreditation body, may or may not be subjects of or become issues for discussion at the closing conference, however, the assessor must continue to gather the information necessary to complete the assessment process.
  - Letter (b) stated: The assessment report shall be presented to the FSMO within thirty (30) days of the last day of the on-site assessment.
  - Letter (c) stated: The accreditation body shall allow the FSMO thirty (30) days after receipt of the report to provide a corrective action plan on any identified deficiencies to the accreditation body. An extension to this third-day period may be agreed if possible enforcement actions have been indicated.
  - Letter (e) stated: If a second corrective action plan is found unacceptable, the accreditation body shall consider denial of initial accreditation or re-accreditation status (see Clause 7.9).
  
- In Section 7.9.2.1.2: The entire section was significantly reworded.



**Summary of TNI NEFAP FSMO Program Changes from the 2007 Standard to the 2014 Standard cont.**

---

- In Section 7.9.2.1.3: Letter (c) was reworded, as well as letter (i).
  - Letter (c) stated: Failure to successfully analyze and report applicable proficiency testing samples within a twelve month period;
  - Letter (i) stated: Denial of entry during normal business hours for on-site assessment.
- In Section 7.9.2.1.4: Letter (c) was reworded, as well as letter (i).
- In Section 7.9.2.1.5: Within (b) subsection (ii), (iv), and (v) were deleted.
- In Section 7.15.1.2: Letter (a) was deleted.
- In Section 8.2.5: The entire section was removed.

For more information about the program or for information on how to participate please contact any of the following:

**Justin Brown, Chair, TNI FAC**

[jbrown@emt.com](mailto:jbrown@emt.com)

(847) 875-2271

**Kim Watson, Chair, TNI NEFAP EC**

[kwatson@stone-env.com](mailto:kwatson@stone-env.com)

802-229-2196

**Jerry Parr, TNI Executive Director**

[jerry.parr@nelac-institute.org](mailto:jerry.parr@nelac-institute.org)

817-598-1624



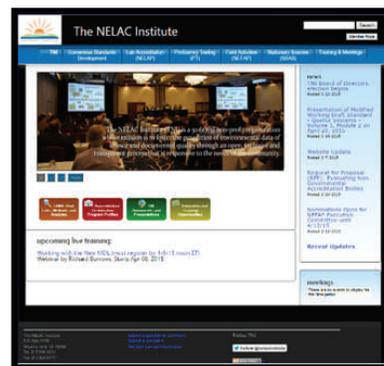
## Website Update

By William Daystrom, TNI Information Technology Administrator

The TNI website has undergone several major revisions over the years. Most of those updates focused on adding content and features — the Education Delivery System, the SSAS Central Database, and so on. On March 7, 2015, we announced the latest major update to the TNI website. The theme of this update is making your experience on the TNI website easier. Here are some highlights:

**Making information easier to find.** The TNI website has always contained a wealth of useful information, but finding that information was often a challenge. To address this, the website's menus have been redesigned from the ground up. The menus are now organized by TNI Program, and provide a comprehensive view of information relevant to each. Feel free to explore — you may discover features you never realized were there!

**Making information easier to access.** The internet is no longer confined to desktop PCs; many people are just as likely to surf the web with a smartphone or tablet. To bring the TNI website up-to-date with the way people use the internet today, the website has been redesigned to adapt automatically to the way you are accessing it. Open the website on a PC and the website will show full menus and stretch to make better use of your screen than before. Open the website on a smartphone, and the website automatically optimizes menus, images, and text for a small screen. Menus and other clickable buttons are also now all responsive to touchscreen use. Some areas of the website, such as LAMS, do not yet feature this new accessible design, but over 90% of the website is now viewable, and usable, via smartphone.



TNI 2015

**Making TNI easier to follow.** In addition to the RSS feed that was previously available, we have added a button at the bottom of each page so that you can easily follow TNI on Twitter. News that is posted on the TNI website will also be posted to our Twitter feed. You can click here to follow us on Twitter now: [@nelac institute](https://twitter.com/nelac institute).

**Making information easier to save.** Previously, when you printed or made a PDF of a TNI webpage, that page included extraneous material such as menus, graphics, and other formatting that interfered with the information you wanted to save. Most pages of the TNI website have now been updated to print without that interfering material, meaning your printouts and PDFs will be clearer and better represent the information on the webpage. Just use the print function built in to your browser to try it out.

If you have any comments or questions regarding the website, please contact TNI's IT Administrator, William Daystrom, at [william.daystrom@nelac-institute.org](mailto:william.daystrom@nelac-institute.org), or use the contact form on the website.

### INELA and TNI websites throughout the years. Click on each graphic for a larger view.



INELA 2002



INELA 2006



TNI 2007



TNI 2008



TNI 2011



TNI 2012



## **Kentucky Begins Accreditation of FSMOs**

*By Zonetta English, Louisville Jefferson Co., MSD*

---

The Kentucky wastewater laboratory certification regulation 401 KAR 5:320 has a compliance date of January 1, 2016 for field-only laboratories. A “field-only laboratory” is any facility or entity that performs any analyses required for a Kentucky Pollutant Elimination Discharge System (KPDES) permit for the following field parameters: pH, residual chlorine, dissolved oxygen, conductivity, turbidity, and temperature.

In order to obtain certification by January 1, 2016, the Kentucky Division of Water must receive the completed application by October 1, 2015. The application and other documents to assist in the compliance of the regulation can be found on the following website: <http://water.ky.gov>.

Questions about certification should be emailed to: [dowlabcertification@ky.gov](mailto:dowlabcertification@ky.gov).

## Remembering Dr. Charlie Carter

(September 27, 1951 to February 12, 2015)



friend. mentor. son. brother. husband. father. environmentalist.

*"We are deeply saddened to announce that Charlie Carter has passed away. Charlie's brilliance, relentless work ethic, and passion were the source of amazing energy and innovations that enriched not only our firm and our clients, but the testing Industry at large. The Industry is immeasurably better because of Charlie."*

*– Rachel Brydon Jannetta, TestAmerica Chairman and CEO*

Charlie always had a friendly face and a warm smile that he would use to put one at ease so you could easily share his passion for science and the environment. This passion was seen in his education; career has been felt by members of The NELAC Institute (TNI) for many years. Charlie received a Bachelor's degree from Earlham College in 1973 and a Ph.D. in Environmental Chemistry from Drexel University in 1981. He spent his career in the field of environmental testing and analysis and had over 30 years of experience in both the technical and business aspects of the field. Charlie was the Vice President of TestAmerica, where he spent the last 15 years working to provide expertise on technical matters by providing critical scientific expertise and supporting the business aspect of the environmental firm.

Dr. Carter was very active in the environmental industry and had been a leader in many areas for many decades. Jerry Parr, TNI Executive Director, met Charlie in the early 1980's where they realized they shared the same list of issues and passions regarding the environment and the newly-released EPA methodologies. Jerry stated that Charlie was always involved in the process and was a mentor and advisor to many over his career. He was active on the NELAC Program Policy and Structure Committee in the 1990's, was active in ACIL, and attended regional laboratory meetings around the country.

Charlie always gave spirited presentations to ensure that useful information and data was collected and used to provide information that made the industry better.

Others in the environmental industry stated that Charlie was a leader in the following topics:

- ☞ showing how correlation coefficient is a useless tool for evaluating calibration curves;
- ☞ appropriate detection and quantitation limits;
- ☞ effective laboratory data integrity programs; and
- ☞ appropriate evaluation of blank results.

When Charlie was not presenting materials, he was at the back of the room listening to others share information and observing the discussions, and would weigh in intelligently when asked directly. Charlie was always around and always willing to help his colleagues, whether over the phone or in-person. Jerry stated that, *"Charlie frequently expressed opinions, but through a different mechanism, giving presentations at the National Environmental Monitoring Conference and then convincing TNI committee members to listen. His work led to a lot of the language on data integrity and instrument calibration in the current standards."*

Dr. Carter will be missed by his family and by the environmental industry. He recently became a member of the Environmental Laboratory Advisory Board (ELAB), which is a committee used to provide consensus advice to the US Environmental Protection Agency (USEPA). In addition, he was preparing a discussion for the 2015 National Environmental Monitoring Conference (NEMC) regarding the statistical analysis of over 2,000,000 data points on surrogate compound recoveries and target analyte recoveries for common SW-846 methods in both



## **Remembering Dr. Charlie Carter**

(September 27, 1951 to February 12, 2015)

---

lab-generated and field-generated matrices. He was working to publish and present his latest work on the “Analysis of Emerging Contaminants in Bats Affected by White Noise Syndrome”.

Charlie is gone too soon and the world lost an intelligent man with high scientific and personal integrity, who was not finished with his work and impact on the environmental industry. Hopefully, his mentorship, the lessons he shared with others, his passion for research, and the influence he left on others will continue his research efforts forward and impact the environmental industry in the manner he envisioned.

*“My favorite memory, repeated many times, is him walking around with a headphone in his ear dealing with some LIMS implementation issue at one of the TestAmerica laboratories.”*  
– Jerry Parr

## THE INSTITUTE REVIEW

First Quarter 2015



### Upcoming Meetings

---

Department of Defense

**Environmental Data Quality Workshop**

April 28-30, 2015

Portland, OR

<http://www.denix.osd.mil/edqw/new.cfm> (scroll to What's New at the bottom of the page)

**TCEQ Trade Fair**

May 5-6, 2015

Austin, TX

<http://www.tceq.state.tx.us/>

**Florida Society of Environmental Analysts**

May 20-23, 2015

Clearwater Beach, FL

<http://www.fsea.net>

**Oregon Environmental Laboratory Association**

May 21, 2015

Salem, OR

<http://bit.ly/1H0EZLh>

**Environmental Measurement Symposium**

July 13-17, 2015

Chicago, IL

<http://nemc.us/>