

April 12, 2013

Ms. Lara Phelps, Executive Director
Forum on Environmental Measurements
United States Environmental Protection Agency
Office of the Science Advisor
109 T.W. Alexander Drive (E243-05)
Research Triangle Park, NC 27709

Dear Ms. Phelps:

The NELAC Institute (TNI) in cooperation with the United States Environmental Protection Agency (EPA) has made great progress towards accomplishing our mutual goal of the generation of environmental data that is of a known and documented quality. We have made significant advancements in the areas of standards development, expansion of the National Environmental Laboratory Accreditation Program (NELAP), Field Sampling and Measurement Organization (FSMO) accreditation, proficiency testing, and educational delivery and outreach. On behalf of TNI, I would like to share these accomplishments with the members of the Forum on Environmental Measurements by offering the attached summary.

Please let us know if you would like any additional information or for us to meet with you to provide more detail. The EPA's support and funding have been instrumental in contributing to TNI's mission of fostering the production of quality data in an open, inclusive and transparent process that is responsive to the needs of the environmental community. We appreciate the strong relationship we have enjoyed with the EPA in the past, and we look forward to our continued collaboration in the future.

Sincerely,

Sharon Mertens, Chair TNI Board of Directors 414-277-6384 SMertens@mmsd.com

# TNI ACCOMPLISHMENTS AND OBJECTIVES

### **Consensus Standards Development**

Two volumes of TNI's environmental laboratory sector standard (ELSS) provide requirements for laboratories and laboratory accreditation bodies. Two volumes for proficiency testing standards related to all types of measurement are designed for proficiency test (PT) providers, and PT provider accreditors. These four volumes are all now classified as American National Standards by the American National Standards Institute. Two additional volumes provide requirements for Field Sampling and Measurement Organizations (FSMOs) and their accreditation bodies.

In our ongoing interest in continual improvement, further ELSS development is underway. A new calibration standard for fixed laboratory management systems is nearing completion, and an update of the PT requirements is in process. We are also beginning development of updates to the management system standards for microbiology, radiochemistry, and chemistry. TNI has established requirements for quality and management systems of FSMOs and their accreditors to improve the quality of data collection, and updates to the standards are in the final stages. Lastly, the Office of Air's recognition of TNI's Stationary Source Audit Sample Program is pending. This program uses three other recently approved TNI standards.

### **National Environmental Laboratory Accreditation Program**

TNI's National Environmental Laboratory Accreditation Program (NELAP) now has 14 states and 15 Accreditation Bodies (ABs.) Region 6 provides a liaison with the EPA and coordinates EPA participation in the evaluations of NELAP ABs, as some regions choose to continue in that role. NELAP has adopted the 2009 TNI ELSS. All NELAP ABs are evaluated against Volume 2 of this standard, which is now based on ISO/IEC 17011. Five state ABs officially accredit laboratories to Volume 1 of that standard, while the remaining 10 state ABs are still transitioning, but do not penalize labs for implementing the "new" standard. Additionally, 28 of the remaining 35 states with laboratory accreditation programs utilize some aspect of the TNI standards or recognize NELAP accreditation as equivalent to their in-state programs. More states utilize the Field of Proficiency Testing (FoPT) tables developed by TNI and virtually all states utilize PT providers recognized by TNI.

TNI provides national resources useful to stakeholders of the environmental laboratory community. These include the Laboratory Accreditation Management System (LAMS) database (<a href="www.nelac-institute.org/lams">www.nelac-institute.org/lams</a>), method and analyte codes used by virtually all state programs, and a database of accreditation/certification programs for every state (<a href="www.nelac-institute.org/abdb.php">www.nelac-institute.org/abdb.php</a>).

Traditionally, laboratories have been accredited under NELAP by state agencies recognized by TNI as Accreditation Bodies. Over the past year, TNI has initiated a major effort to evaluate how Non-Governmental Accreditation Bodies (NGABs) may participate in NELAP. In March of this year, a working group was convened to develop the policies and procedures to implement a program that would recognize NGABs to accredit laboratories to the TNI laboratory standard. We expect this to be a reality in early 2014.

#### **TNI Board of Directors**

Joe Aiello,

New Jersey DEP

Aaren Alger,

Pennsylvania DEP

Steve Arms, Florida DOH

Judy Duncan

Zonetta English,

Louisville & Jefferson Co

Jack Farrell,

Anaytical Excellence

Keith Greenaway, ACLASS

Judy Morgan,

**Environmental Science** 

Corp

Sharon Mertens,

Milwaukee Metropolitan

Patsy Root,

**IDEXX** Laboratories

Alfredo Sotomayor, Wisconsin DNR

Scott Siders, Illinois EPA

David Speis, OC Laboratories

Elizabeth Turner, North Texas MWD

Susan Wyatt, Minnesota DOH

## **Ex-Officio Directors**

Jordan Adelson, DOD

Brenda Bettencourt, EPA Region 9

Brooke Connor, USGS

George Detsis, DOE

The NELAC Institute April 12, 2013

### **Field Sampling and Measurement Organizations**

The National Environmental Field Activities Program (NEFAP) launched the accreditation of FMSOs in August 2011. The NEFAP Executive Committee has developed AB evaluation and recognition procedures for the consistent implementation of the TNI FSMO standards. These procedures are focused on ensuring technically competent organizations provide field activities. The Executive Committee has established a Recognition Committee to perform the review of the evaluation process and provide recommendations on accreditation as well as to make the recognition decision. Currently one AB is fully recognized and is accrediting FSMOs to the TNI 2007 FSMO standard. Three other ABs are provisionally recognized under this program and are awaiting their first FSMO application in order to complete the recognition process. Two other ABs are expected to apply for recognition.

### **Proficiency Testing**

The PT Program Field of Proficiency Testing (FoPT) tables have traditionally included drinking water, non-potable water, solid and chemical materials, and whole effluent toxicity. The program has expanded to also incorporate stationary source audit samples and field lead (Pb) testing. Additionally, work is underway with EPA to develop FoPT tables for Cryptosporidium. NELAP, non-NELAP and NEFAP ABs rely heavily on the PT Program as part of their accreditation programs. There are currently two TNI approved PT Provider Accreditors (PTPAs), both perform ongoing monitoring of PT Providers to ensure conformance with the TNI Standards. The PT Program Executive Committee is working with both PTPAs to develop a mechanism to gather information to evaluate the ongoing effectiveness of the PT Program.

Each of the TNI-recognized PTPAs maintains a database to evaluate the performance of each PT Provider. TNI considered establishing a national database to collect PT data that could be used to help establish FoPTs, but concluded such a database was not needed.

### **Educational Delivery System**

In 2011, TNI started a new process for providing training called the Educational Delivery System (EDS), a comprehensive training system that utilizes multiple face-to-face and web-based training venues. Training courses, workshops, forums, seminars, and on-demand webinar education materials are developed by TNI and its contracted training providers. TNI's training efforts are focused on improving the quality and consistency of laboratory assessments, assisting laboratory quality managers in understanding the accreditation requirements, and providing technical training to laboratory analysts and field professionals. In 2012, TNI provided 27 training events that reached over 1300 individuals. TNI's goal is to move much of this training on-line, and already nine webinars have been recorded and are available for viewing as downloadable webcasts. A number of additional training courses are planned for 2013. To see the current list of courses being provided, go to the TNI EDS webpage (http://www.nelac-institute.org/edshome.php).

#### **Outreach**

In keeping with TNI's vision for truly national environmental programs, we have a number of on-going outreach efforts in addition to our biannual meetings. These include submitting articles for publication in the Water Environment Federation's Lab Solutions newsletter, inviting non-NELAP states to participate in periodic teleconferences of the NELAP Accreditation Council, having representatives at lab and trade organization meetings, and providing training and assistance with regulations such as EPA's latest Methods Update Rule. Also, to ease the somewhat intimidating task of developing documents from scratch, TNI offers Quality Manual and SOP templates for purchase by anyone, but particularly designed for small labs. Additionally, TNI established the Small Laboratory Advocate role to lead a group continuing the long-term commitment begun by the National Environmental Laboratory Accreditation Conference to embrace the small laboratory community and to assist them with accreditation and lab quality issues. During the coming year, TNI will emphasize outreach to encourage the adoption of the NEFAP accreditation for FSMOs by regulatory authorities.

The NELAC Institute April 12, 2013