
# Exploring the Future of National Environmental Laboratory Accreditation

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## Attachments

# Executive Summary

In response to communication between the Environmental Laboratory Advisory Board (ELAB) and 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-National Environmental Laboratory Accreditation Program [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.

Barriers to national accreditation generally fell into three categories:

1) technical issues related to the standards,
2) the need for additional communication and outreach to stakeholders, and
3) state/EPA roles and involvement.

In evaluating the input received, it was evident that in several areas participants had outdated information or misperceptions about how TNI and national accreditation currently operate. Additionally, as one commenter correctly noted, a number of the issues and barriers identified are outside of TNI's ability to control.

There were, however, a number of actions identified that TNI can pursue to promote and facilitate the expansion of national accreditation. The TNI Board of Directors has included objectives in their 2015-2020 strategic plan to address a number of the barriers and issues identified. The objectives focus on continuing to promote acceptance of the TNI environmental laboratory standards by non-NELAP states and promoting third-party accreditation as an alternative to states that do not have the resources to establish their own programs. TNI will also maintain and expand technical assistance to states and laboratories. TNI will expand outreach to non-NELAP states by offering free TNI memberships and a free introductory webinar.

While some specific barriers to expansion of national accreditation were identified, responders also noted a number of positive aspects to the current program, including recognition of the TNI Standards as a benchmark for laboratories, and TNI's conferences and training as a means to facilitate communication and compliance. It was also noted that many states have reaped benefits from the national accreditation program even though they do not participate as NELAP accreditation bodies.

# Exploring the Future of National Environmental Laboratory Accreditation

## Background

On November 2, 2012, the Environmental Laboratory Advisory Board (ELAB) sent a letter to U.S. Environmental Protection Agency's (EPA) Forum on Environmental Measurements (FEM) with a recommendation stating that:

> *EPA should create a vehicle that enables the Agency to team with state programs that have limited resources to develop rules that establish NELAP as the laboratory accreditation standard in their states*. In their response to ELAB dated February 19, 2013, the FEM stated that *the FEM has provided funding through a cooperative agreement for the development of standards, guidance, training, and tools to benefit state, tribal, and local agencies, in addition to the public and private sectors for several years. This vehicle is currently under award to The NELAC Institute (TNI). We will convey the additional need for state, tribal, and local agency support to set-up regulatory programs for accreditation or certification programs within their purview; however, it is ultimately TNI's decision on how to prioritize and address this request based on the resources they have available from the Agency.*

The FEM's response clearly indicated that they are looking to TNI to review the issue of how to move national accreditation forward, and if appropriate, make a recommendation to re-prioritize cooperative agreement funds to address this concern. At the summer 2013 meeting, the TNI Board of Directors discussed the FEM's response and noted that the original assumptions that the EPA would direct the program and all states would participate are not valid assumptions today, and thus the approach to moving national accreditation forward may need to change. The TNI Board charged the Advocacy Committee to determine a course of action in response to the FEM's letter.

## Methods and Objectives

At the Louisville meeting in January 2014, the Advocacy Committee asked for suggestions from participants on the best way to move forward with this project. Participants suggested that TNI get input from stakeholders on the following topics:

- Successes of the current program
- Areas for improvement of the current program
- Barriers to state and EPA acceptance of NELAP accreditation
- Ways to help states overcome these barriers
- The importance of reciprocity/recognition in interstate commerce

- Alternatives for moving national accreditation forward
- How TNI's plan to recognize non-governmental accreditation bodies (NGABs) fits into this discussion

To begin gathering the information needed to chart a new course, TNI staff contacted representatives from all non-NELAP state programs by letter and email and offered them the chance to be interviewed. Out of the 39 contacts made, 20 non-NELAP states participated in interviews. Interview participants were asked to respond to the questions shown in Attachment 1.

Using the information gathered in the interviews with non-NELAP states as a starting point, the TNI Advocacy Committee then hosted a webinar on July 17, 2014 to continue soliciting input from the stakeholder community. Written responses were received from the following stakeholder groups:

- 51 laboratories
- 8 government accreditation bodies (non-NELAP)
- 8 NELAP ABs
- 5 consultants
- 5 federal agencies, including 2 from EPA
- 3 others
- 1 vendor
- 6 unidentified

Survey questions and responses are shown in Attachment 2.

This process then culminated in a workshop on Friday, August 8, 2014, at the Environmental Measurement Symposium in Washington, D.C. Feedback received from the non-NELAP states and other stakeholders was summarized and questions formulated to solicit solutions to the issues and/or barriers identified. Approximately sixty (60) people participated in three (3) breakout groups to brainstorm solutions to the issues identified. Breakout session discussion topics and questions are shown in Attachment 3.

Recommendations from these sessions were summarized by staff and Advocacy Committee leadership according to what was perceived to be the highest priority and the most realistic to implement. These recommendations were then forwarded to the TNI Board for consideration in the strategic planning process.

## Findings

In response to the question concerning their reasons for not becoming a NELAP Accreditation Body, the non-NELAP Accreditation Bodies stated:

- Their state program was too small to justify the resources needed to become a NELAP Accreditation Body.
- A perception that EPA is not directing or supporting the program, which was a critical point for their laboratories and/or state leadership.
- A belief that NELAP accreditation would be too expensive for laboratories (accreditation fees and extra Proficiency Test samples).
- State leadership does not support the concept of a national program.
- Several states cited a philosophical difference in technical approach to accreditation.
- Beliefs that while the concept of national accreditation is good, the program is too cumbersome for small laboratories.

Of the non-NELAP states interviewed, most used some part of the TNI Standards in their program. The most frequently mentioned was the use of TNI-approved Proficiency Test sample providers. Others used some aspect of the TNI Standards, including:

- Method and analyte codes
- Definitions
- Quality systems requirements
- Ethics requirements
- The 2003 Standards in its entirety

Six (6) states used only the *Manual for the Certification of Laboratories Analyzing Drinking Water*.

A number of the non-NELAP states recognized that there have been benefits and successes from the establishment of a national program. The benefits and successes cited included:

- TNI Standards are more robust than *Manual for the Certification of Laboratories Analyzing Drinking Water* and include ISO language.
- National accreditation has created an opportunity for better communication among laboratories, states, and other stakeholders.
- Provides mechanism to approve Proficiency Test sample providers.
- Brings awareness of the need to accredit all laboratories, especially wastewater.
- Beneficial for laboratories working across state lines.
- Creates consistency, single standard, equivalency of data.
- Helps laboratories get operations in order, Standard Operating Procedures, etc.

From the July 17, 2014 webinar, other stakeholders identified **reciprocity** as the primary benefit of a national accreditation program. Other benefits identified included:

- Improved quality systems
- Fewer audits, lower costs for laboratories
- Comparability/uniformity of data
- PT program
- Technical assistance (training, quality assurance manual templates)
- Improved communication

Three (3) respondents stated that they did not see any benefits to national accreditation. In response to the question concerning areas for improvement in current program, both the non-NELAP states and other stakeholders expressed the belief that the TNI Standards need to be more stable – that there are too many changes. In addition, some of the non-NELAP states believed that EPA was no longer involved to any degree in TNI's accreditation program and identified that as an area for improvement. Other areas for improvement noted by non-NELAP states included technical assistance to both states and laboratories and suggestions for changes in the technical aspects of the standards. Other stakeholders identified areas for improvement as greater consistency among ABs and assessors, support for small laboratories, more state and EPA involvement, and changes to the required frequency of proficiency testing.

Other specific issues cited included:

- The program should only require one (1) PT per year instead of two (2).
- The standards need more emphasis on methods, less on quality systems and paperwork.
- The standards need more emphasis on data audits.
- Commercial laboratories have too much influence as evidenced by the 2009 Standards.
- TNI and EPA should recognize that not every state can participate and encourage third-party Accreditation Bodies.
- TNI should work to improve consistency among current Accreditation Bodies.
- TNI should better align the standards with the *Manual for the Certification of Laboratories Analyzing Drinking Water*.
- There should be a way for state laboratories to get accredited without having to use another state as accreditor.
- Cost for states to run an accreditation program and laboratories to be accredited need to be reduced.
- It should be easier to find information on TNI website.
- There should be training for writing regulations and for assessors.
- Encourage more EPA involvement.

If the program were being designed today, respondents believed that the program standards would be essentially the same, but would allow third parties to accredit laboratories. Some thought the standards should be more streamlined and not as cumbersome or expensive for small laboratories. Some expressed a desire for EPA to mandate that all laboratories be

accredited, especially wastewater laboratories. Many wanted to see more EPA involvement and stated a belief that if EPA ran the program, all states would participate.

## Conclusions and Recommendations

Based on the feedback from the non-NELAP states and other stakeholders, the issues and barriers roughly fell into three (3) 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 that 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 Accreditation Bodies to grant accreditations to the TNI Standards.
- 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 standards are deemed "equally effective" to the *Manual for the Certification of Laboratories Analyzing Drinking Water*.
    - Monitor changes to the *Manual for the Certification of Laboratories Analyzing Drinking Water*.
    - Develop a document that summarizes the differences and similarities (distill down from the crosswalk) of the TNI and EPA Drinking Water (DW) programs.
- 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 a Marketing and Outreach subcommittee 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 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 Field Sampling and Measurement Organizations (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.
- Consistently have a seminar at the National Environmental Measurement Conference (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 Accreditation Bodies to accept the accreditations granted by Non-Governmental Accreditation Bodies (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 Standards 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, responders also noted a number of positive aspects to the current program. With regard to the standards, respondents stated that the current national standards were robust and created a benchmark for laboratories. There is a perception that being accredited to the TNI Standards 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 Accreditation Bodies.

# ATTACHMENT 1

## Summary of Interviews with Non-NELAP States Regarding NELAP Laboratory Accreditation

## States Participating:

AR, AZ, CT, DE, ID, IN, MD, MA, MS, MO, MT, NV, ND, RI, SC, SD, WA, WV, WI, VT

1. **What kind of laboratory certification/accreditation program does your state currently operate? Number and types of laboratories in the program?**

   Of the twenty (20) states interviewed, ten (10) had drinking water certification programs only. Ten (10) operated DW plus non-potable water (NPW) and/or RCRA (solid waste) accreditation.

   Of the DW certification programs, all but two (2) certified fewer than fifty (50) laboratories, with two (2) programs certifying only five (5) laboratories.

   The DW plus NPW and RCRA programs were larger with all but two (2) programs having over fifty (50) laboratories and four (4) programs over 200 laboratories.

2. **Are you familiar with NELAP accreditation? Has your state ever considered becoming a NELAP-recognized Accreditation Body (AB)? What were the factors in your decision process?**

   All but one (1) state indicated they were familiar with NELAP accreditation. The one state not familiar indicated they had not read the standards because they believed they would have to pay for them.

   Eight (8) of the states interviewed indicated they had considered becoming an NELAP AB. Factors that discouraged states from becoming a NELAP AB included:

   - Cost to state to become a NELAP AB. This includes recognition fees paid to TNI and costs to increase the number of state assessors and other program staff.
   - A belief that laboratories in their state would not support the cost of additional PTs required by NELAP.
   - EPA is not directing the program.
   - Region 2 does not support NELAP. The commitment of other states is uncertain, e.g. Florida. That could have serious consequences for other states.
   - The national program is not stable. There are too many changes in the standards.
   - State program is too small and most laboratories in their state are small utilities.
   - The state prefers certification by method as is done with DW certification.
   - State leadership does not support the concept of national accreditation.

- NELAP places too much emphasis on quality systems and documentation. State believes technical competence is more important.
- NELAP assessors are not required to have bench experience.
- NELAP accreditation is too expensive for laboratories, accreditation fees and PTs.
- State lacks the statutory and/or regulatory authority.
- The state did not have support from state laboratory association, primarily wastewater laboratories.

**3. Do you use any parts of the TNI Standards in your non-NELAP program?**

Six (6) states indicated they use only the *Manual for the Certification of Laboratories Analyzing Drinking Water* in their program.

The other states used some elements from the TNI Standards, including:

- TNI-approved PT providers (most commonly mentioned)
- Method and analyte codes
- Definitions
- Quality systems requirements
- Ethics requirements

One state has adopted the 2003 Standards into their state regulations. They believe the 2009 Standards are too lenient and probably will not adopt these. Another state has adopted much of the TNI Standards into regulations with the primary difference being PT (1 per year) and audit frequency (every 3 years).

**4. Do you interact with other state certification programs? Do you recognize other certifications/accreditations?**

Seventeen (17) of the states indicated that they accept certifications/accreditations from other state programs, including NELAP. However, most states still required a full application and submission of some documents such a PT results, and SOPs. Most routinely accepted onsite assessments done by other states, either DW certification or NELAP accreditation. Some states cited a ban on out-of-state travel as the reason for accepting the onsite assessment report. Some states retain the right to conduct an onsite if conditions warrant, but as one state said, “We trust the other states to do their job.”

Three (3) states did not have reciprocity with other states and did not accept certification or accreditations from other states. One state indicated they could not accept any other certifications because their philosophy on certification was very different from other states (emphasis on data audits). Another indicated that while their state regulations allowed reciprocity agreements, they did not have the time or resources to evaluate other programs for comparability. The third state indicated that while they have no reciprocity, they do try to use the onsite assessment from other certifications.

Most non-NELAP states indicated they have good relationships with surrounding states and they use the TNI meetings, State Assessors Forum, APHL, and the New England Certification Officers group as avenues to communicate with other states.

5. **Are there areas where you think you could reduce your workload by additional collaboration with other states?**

   Nine (9) states did not see any areas for additional collaboration with other states.

   Suggestions by the other states included:

   - States need to be more consistent in method accreditation, e.g. SW 846, to make certificate comparison easier, and facilitate reciprocity.
   - PT spreadsheets should be easier to manipulate.
   - More standardization and consistency is needed among state programs.
   - There needs to be a simpler way to accredit out of state laboratories.
   - States need a database where they can independently track a lab's certification status.
   - There needs to be more participation by EPA.
   - States need an easier way to keep up with changes in DW certification and the TNI Standards.

6. **What do you think are the benefits and/or successes of NELAP accreditation? Do you see any benefits in a national accreditation program above the state by state programs?**

   The benefits cited by states are grouped by topic.

   <u>Standards</u>

   - The TNI Standards are more robust than the *Manual for the Certification of Laboratories Analyzing Drinking Water* and cover more than the *Manual for the Certification of Laboratories Analyzing Drinking Water*.
   - As a QA person, she prefers the TNI Standards approach to accreditation. Likes that many programs are now on the same page.
   - It is the highest standard. If a laboratory achieves NELAP accreditation, then you know it has its ducks are in a row. It is the benchmark.
   - The greatest benefit is in court. NELAP accreditation provides credibility for laboratories, assurance for data.
   - ISO language in the standards is a benefit. It is important that national standards are available.
   - The MUR essential QA/QC would not have happened without a national program.

Communication

- Having national standards has created good dialogue among states and private sector. However some states perceive that emphasis has shifted to private sector and are not willing to participate anymore.
- Since the inception of a national program, there is much more communication among states. TNI has brought the laboratory community together. It used to be difficult to get assistance from other states. Many good contacts are made at TNI conferences. It is nice to know what other states are doing.
- There is enthusiasm in the laboratory accreditation community.
- There is more consistency in a national program.
- NELAP has created a forum for dialogue on laboratory accreditation issues.

Proficiency Testing

- PT standards and approval of PT providers.
- PT program, method and analyte codes.
- In proficiency testing, TNI is the only game in town.

Other laboratories besides drinking water

- NELAP has brought awareness of the need for oversight for all environmental laboratories, not just DW.
- There is not any benefit in a national program for DW laboratories. However, other programs could benefit from accreditation.

Out of state laboratories

- Having national accreditation is good for states that have to use out-of-state laboratories for additional expertise, such as radiochemistry. A national accreditation program gives the states and utilities options for finding accredited laboratories outside of their state.
- A national program is beneficial for laboratories working across state lines.

Other

- Our state has always supported the concept of national accreditation, but we want EPA to be involved.
- We particularly like the NEMC meeting.
- The concept of national accreditation is good, but the current program is too cumbersome for small programs. Cost is an issue for the state. Our current average accreditation fee is $1000. We would have to increase fees.
- NELAP accreditation has been beneficial helping laboratories to get their systems in order (SOPs, etc).
- Unifying laboratory operations from a national standpoint is beneficial. We support national accreditation in principle. It is good to have comparable data from different sources and we need to move the concept along.

- National accreditation brings consistency, a single standard, and equivalency of data.
- Yes, there are benefits, but our state just doesn't have time to participate.

**7. TNI is currently planning to recognize non-governmental accreditation bodies to grant accreditations to the NELAP Standards. Will this make a difference to your state? Can you accept an assessment report from a third party?**

Of the states interviewed, three (3) were not certain if their state could accept a third-party assessment or accreditation. One state that was DW only said they would defer to EPA for an opinion.

Six (6) states indicated they would not be able to accept a third-party accreditation. In some cases, state regulations specify a "state" accreditation. Other states noted that although they could accept a third-party assessment report, EPA OGWDW and the Regions would not allow recognition of a third-party accreditation body. Enforcement (suspension and revocation) was mentioned a major concern with third-party accreditations. One state noted that the states and EPA own the regulations and third parties do not fit into this scheme.

Eleven (11) states indicated they could accept third-party accreditations. In most cases, the states noted that the accreditation would be handled similarly to an out-of-state accreditation. Some also noted that they already accept A2LA, AIHA, and NSF. This would be no different for them as long as TNI had oversight.

**8. What do you see as areas for improvement in the current program? Are there areas you would like to improve in your current program? What assistance could TNI provide to help you?**

The areas for improvement cited are grouped by topic.

<u>Standards</u>

- Requiring two (2) PTs is a stumbling block for many states and laboratories. Requiring only one (1) PT would facilitate expansion of the program. This would make a difference to some states.
- The standards should not require SOPs to be so prescriptive.
- NELAP assessor responses to questions about standards are very vague. States need examples of how to do corrective action on some issues.
- The program needs to be streamlined. Audits should be more consistent.
- There should be more consistency in accreditation for methods. NELAP accredits for methods not approved by EPA.
- All versions of SW-846 should be allowed, not just the most recent version.
- There should be more emphasis on data audits.
- There has been a perceived lack of direction in national accreditation and many states are taking a wait-and-see position.

- TNI Standards already do a good job; no significant changes are needed. TNI should focus on keeping the program stable, not so many changes year to year.
- The three (3) year vs. two (2) year audit cycle has been a problem for many states and should be reviewed.
- There needs to be more of a method/analyte emphasis than quality system.
- The standards themselves are in good shape, but we would like them to stabilize and not keep changing.
- There should be more data integrity reviews for the purpose of detecting improper practices by laboratories.
- National accreditation should be required for wastewater laboratories.
- There should be less emphasis on paperwork and documentation. It is important for QA/QC, but not so much the other stuff. Excessive documentation makes it difficult to get other work done.

Technical assistance

- Access to information on TNI website is difficult. We heard about the draft radiochemistry standards, but couldn't find them on website.
- Our state does not get regular communications from TNI (but acknowledges that membership may have lapsed). Is the newsletter going to all states regardless of membership status?
- Too much paperwork is required for small laboratories. Also, there is so much turnover in small laboratories. NELAP accreditation should include more training and guidance for small laboratories.
- Non-TNI members don't get much in the way of assistance from TNI.
- NELAP assessors are too inconsistent.
- There has been a perceived lack of direction in national accreditation and many states are taking a wait-and-see position. National accreditation needs to be helpful to laboratories, and needs to focus at the bench level.
- TNI should provide guidance to states on how to set up a laboratory for NELAP accreditation, how to become accredited, explain how the program interfaces with other accreditation programs like DW, ISO, etc.
- TNI could assist with writing regulations and with training.
- Assessor inconsistency issues needs to be addressed. EPA sends assessors for DW who have never done GC/MS. Assessors should have experience in the fields of accreditation and instrumentation being assessed.
- There should be central or regional authorities for technical support.

EPA

- National accreditation needs more EPA involvement. There should be a mandate for accreditation of all environmental laboratories, not just DW.
- EPA Regions are not consistent in their approach/acceptance of NELAP accreditation.
- EPA Region 4 will not allow a deviation from the DW certification manual. This can be a challenge for states seeking NELAP recognition.

- TNI should work with the EPA to provide DW certification training in other places besides Cincinnati. This training needs to be de-centralized.
- The lack of state and federal statutory requirements keeps the program from going forward.
- There needs to be more consistency across the country from EPA Regional offices.
- There should be more EPA-approved training of assessors.

**9. If the program were being designed today, how would it look given that EPA is not directing the program? What critical elements would be important to your state? What changes could be made to better accommodate your states needs?**

Comments received are grouped by topic:

Standards

- The standards would be the same if written today, but allow states and third parties to be accreditation bodies.
- TNI should go back to 2003 TNI Standards. The 2009 Standards are too watered down. Commercial laboratories have too much influence. The PT is watered down and "shall" and "must" is now "should".
- The standards should include analyst certification.
- A national program should be as stringent as their state program.
- Current program is only advantageous to laboratories, not to states.
- There should be more emphasis on technical competence.
- The focus on quality management is a good thing and should continue.
- The benefits of two (2) PTs per year should be documented.
- Terminology should be consistent (standardized) across programs and states.
- Uniform standards across all states may not be realistic. Some states are more rural. One size fits all doesn't always work. There should be more flexibility in the program.
- Eliminate the requirement for paper files. Electronic files should be OK.
- ISO basis is the way to go, and needs to be consistent throughout the country.
- The quality system approach is needed, especially for DW, but make sure we don't get caught up in minutiae. PTs are important. Results need to comparable, laboratory to laboratory. "Someone" needs to require accreditation.
- It would be helpful if the TNI Standards were aligned to the *Manual for the Certification of Laboratories Analyzing Drinking Water*. It is critical in DW for laboratories to follow methods, but also offer guidelines for QA for laboratories to follow. Laboratories need to be capable and also accountable.
- National accreditation is a good idea, but not realistic. States are not comfortable giving up control. Needs to be more state-driven. Laboratories like a personal relationship with the state agency.
- Current program has too much emphasis on PTs. The limits on solid waste PTs are too wide to be useful.

- We've made a good start on national accreditation. What's missing is a link to the states (guidance, procedural documents for states). It is a conflict of interest for one state to accredit another.
- ISO 17025 with enhancements is the critical element.
- We should understand that not every state can participate. Allow and encourage third-parties.
- Standards should be consistent from state to state, even if the assessors are not.
- Modernize the DW methods and provide more guidance.
- Develop a way to be free of conflict of interest for state laboratories seeking accreditation. States shouldn't accredit other states. See APHL paper on accreditation of state laboratories for critical elements.
- Standards should be consistent and uniformly applied in all states, but with flexibility for state needs. There should be appropriate federal authority for all programs and appropriate state authority for enforcement.

Cost/Resources

- State resources are an issue, and should be kept in mind.
- Consistency, less paperwork, focus on cost reduction.
- Money will be the big issue. Fees don't go back to the program in some states and increases will be difficult.

Small Laboratories

- A national program needs to be easier for small laboratories.
- We need to find a way to accommodate small facilities. Also, there should be a fund for utility laboratories like the DWSRF and CWSRF, so small laboratories can use it to upgrade equipment and get training when methods change. Laboratory associations do provide training, but equipment is the greatest need.
- National accreditation needs to be more streamlined, and not as cumbersome and expensive. It is too intrusive for small laboratories. As an example, the degree of detail required for tracking of phone calls is not necessary. Not all required paperwork is related to data quality.

EPA

- High level observation is that the EPA may have the right idea, but NELAP is more organized.
- National accreditation should mirror the program set up by EPA Region 3 (incorporating the TNI Standards in DW program).
- Wastewater laboratories need to be accredited like DW.
- EPA is the answer. If EPA ran the program, then more states would participate.
- Make a regulatory requirement for laboratory accreditation in all programs.

**10. Does your state currently accredit field sampling and measurement organizations or mobile laboratories? Do you have any plans to do so?**

Eight (8) states indicated they do not accredit mobile laboratories or field sampling and measurement organizations, and have no plans to do so. Several thought accrediting FSMOs was a good idea.

Six (6) states licensed or accredited samplers for drinking water and/or wastewater.

Seven (7) states accredited mobile laboratories.

None of the states indicated any plans to change current practices.

Other

- We are grateful to TNI for all the work that's been done on national accreditation. We don't always agree, but that's OK.
- Some states are rubber-stamping laboratories. State programs have different levels of effectiveness.
- States are reaping benefits, even if not participating as accreditation bodies.
- Some NELAP certificates don't reflect correct EPA methods. We can't accept these for DW certification.
- Some NELAP states only specify technology, not method. We can't accept this for DW certification.
- Everyone needs to be on the same page.
- NELAP is a good program and are good standards for laboratories to strive for; however, it is not appropriate for small laboratories.
- EPA memo on laboratory competency: We need a clear definition of "laboratory competency" and how NELAP compares.
- The greatest difficulty is communicating the tangible benefits of laboratory accreditation to agency heads and the state legislature.
- There is a place for NELAP, and there needs to be accountability and accreditation for other programs, not just DW.

# ATTACHMENT 2

## Summary of Survey Responses from Other Stakeholders Regarding NELAP Laboratory Accreditation

1. **Stakeholders Participating:**

   A total of 87 responses were received. A breakout of stakeholder affiliations included:

   - 51 laboratories
   - 8 government Accreditation bodies (non-NELAP)
   - 8 NELAP ABs
   - 5 consultants
   - 3 federal agencies
   - 2 EPA
   - 3 others
   - 1 vendor
   - 6 unidentified

2. **What do you think are the benefits and/or successes of NELAP accreditation?**

   The most frequently mentioned benefits and successes of national accreditation included consistency among state programs, quality of data produced and the emphasis on quality systems, and reciprocity. One commenter summed it up by saying that "as a TNI-accredited private laboratory in a non-NELAP state, it drives us to do better science, it has vastly improved the quality and defensibility of our reported results, and because the accreditation is optional in our state, it gives us a competitive edge."

   Regarding reciprocity, a commenter states "When it works as advertised, a single auditing effort (with response/corrective action, etc.) covers multiple states, leading to decreased burden on the laboratory. Being able to get certified in a reciprocal state in the time it gets to clear a check is a great benefit, aiding laboratories to respond quickly to client requests."

   Another commenter noted that the NELAP program raised the bar and leveled the playing field on what to expect in terms of quality from an analytical laboratory.

   Four (4) commenters indicated that they did not see any benefits. One noted that it is not a national program because the participating accreditation bodies do not treat it as a national program and the non-NELAP other states do not recognize it as a national program. They did not feel that NELAP helped the laboratories or their clients. Another commenter noted that while the NELAP program is a good attempt at a single program, without strong EPA backing in all regions, a single national program is not feasible at this time.

**3. Do you see any benefits in a national accreditation program over the state-by-state programs?**

Almost all of respondents indicated they thought there were benefits to a national accreditation program over state-by-state programs. The most frequently cited benefits were consistency, uniformity, and reciprocity. Comments included:

- For the private commercial laboratory there is a huge cost savings. I used to have more than thirty (30) certification audits a year...now we have just a few for private companies.
- Absolutely, having one national program should not only level the playing field on a national level, but in theory it should reduce expenses. The European Union has one standard to follow and it makes their program much more seamless.
- Same standard across the country – ease of accreditation for commercial laboratories working with multiple states. Customers would know that they get the same quality even with an out-of-state laboratory.
- Absolutely, a single rigorous system saves laboratories time and money while eliminating the need to develop internal quality systems that must meet competing requirements.
- While having a national program would be beneficial, ISO would be a better option.

Additional benefits cited in having a national program included less paperwork for laboratories, data comparability, and consistent quality systems requirements.

Concerns expressed by those commenters that did not see benefit in a national program included:

- The current ABs do not operate their programs in a consistent manner. A national program will not be clearly beneficial over state programs until NELAP states quit putting their own spin on NELAP. The state programs have too much variability/ disagreements with what they feel is acceptable. What is one state's requirement may be in direct conflict with another state's requirement.
- Having one program oversee all fifty (50) states would be too much bureaucracy for the program to work effectively.

One commenter noted that it seems that 40 CFR (and specifically Part 136) and its Method Update Rules have the most influence over laboratories and their activities. The commenter stated that the states are mandated to adopt the changes in MUR and that ultimately puts everyone on the same page. NELAP has to adopt changes based on 40 CFR also, which seems like a duplication of efforts. The concept of NELAP was valuable back in the day of its founding, but the landscape and economy have changed since then.

Another commenter stated, "The only benefit is secondary accreditation. NELAP isn't better than some state programs just because it is "national". We need a national program that

allows both state participation and non-governmental AB participation. The future is in a national program functioning at the state level that uses third-party programs."

**4. If the program were being designed today, how would it look given that EPA is not directing the program?**

Over a third of the participants did not respond to this question or indicated that they were not sure how the program would differ if designed today. Several indicated that while it was not necessary for EPA to direct the program, it was beneficial for EPA to participate and for the TNI Standards to be consistent with EPA regulations.

One commenter said, "I'm not sure it would need to look differently from the current program. The original planning was based on EPA directing the program, but I think the same goals could be obtained without that."

Additional comments included:

- The program would use ISO 17025, 90001, and third-party accreditors if designed today.
- It would be a weaker program because it would be designed by the regulated industry.
- There would be less paperwork and documentation required for laboratories.
- It would be totally voluntary with no consistent oversight.
- Reaching consensus on an initial standard could be a lot more difficult with no single agency driving the process.
- With all of the agencies involved (EPA, DOD, DOE, USGS, etc.), as well as the states and the regulated laboratories, the program would likely be a bit more complex.
- I would like to see a committee where a member from each NELAP state MUST participate to form consistency, ease reciprocity and handle complaints/inquiries.
- I also agree that a data audit, and not just a system audit, would be an improvement.
- Design of a robust mechanism for the EPA to steer the program and provide directions/requirements/mandates. Mechanisms to communicate EPA's directives; mechanism for TNI to apply them.
- The optimum system without EPA involvement is a 100% privately operated accreditation standard.
- A strong EPA presence and EPA mandate are necessary for a national program to ever be successful.

**5. Is it important to you for EPA to be more involved? How so?**

Responders were about evenly split on the importance of EPA involvement. About half believed more EPA involvement was important and half thought it was not necessary and might even complicate the program. Among those responders who thought EPA involvement was needed, some believed that EPA's visible and stated support was

sufficient, while others wanted to see EPA run the program by developing the standards and managing the assessors.

One commenter noted that since EPA is heavily funding TNI, EPA does not need to directly run the program. EPA needs to promote the use of TNI and third-party programs for accreditation. Another said "I do not have a problem with EPA not directing the program. I like the idea of a third-party such as TNI managing the program. EPA just has to set standards that a third-party has to implement within the program." One commenter stated that they see a great deal of confusion between the state, EPA and tribal work with regards to drinking water. The commenter suggested it would be ideal if the EPA had the resources to dictate and regulate the entire program without the intermediaries.

Some thought the program could benefit from the standards being consistent between EPA and NELAP, and thought that EPA would want some involvement since they are approving methods, accepting data for regulatory programs, collecting data for future regulations and so on.

One commenter preferred to have EPA provide guidance but not complete oversight of program. Another believed that if EPA mandated participation, it would not be important for EPA to run it. And still another believed that EPA should fund NELAP activities, support state involvement in NELAP, and support paid full-time positions in NELAP.

Additional comments included:

- EPA does need to get more involved. While they do not have to direct the program, they can enforce the requirements of TNI on a national level so that all of the states match the higher TNI Standards.
- Environmental analysis is one area in which I think state primacy should be abolished especially if states no longer have a budget to support a robust program.
- The EPA is already involved at a relatively healthy level, with only one exception. The EPA should actively push states to either: 1) get involved with TNI (or equivalent organization) or 2) accept third-party ISO 17025 accreditation.
- EPA involvement is not important. Having a consistently applied, truly "national" program is important.
- EPA should be directing the national accreditation. EPA could simply run the program (using third-party assessors to reduce the Federal resources needed) and eliminate the involvement by the state departments of environment, health, etc. Or at a minimum, have EPA enforce programmatic consistency at the state level (state-to-state consistency, same processes, same accreditation document, etc.).
- EPA needs to set policies that further encourage and promote the use of accreditation in relation to regulatory compliance.

**6. Would your laboratory use a third-party accreditor?**

The majority of the respondents said they would use a third-party accreditor. Some of the factors that are important in the decision to use a third-party are cost, consistency, and level of service provided.

Respondents also indicated that it was important that the accreditation process was standardized across the board for all accreditors and that third-party accreditors were nationally recognized. Some laboratories in non-NELAP states preferred to be accredited by another state and expressed concern about reciprocity issues from third-party accreditations.

**7. Do you prefer accreditation to ISO 17025 over the TNI Standards?**

The majority of respondents preferred the TNI Standards or had no preference. One commenter noted that the TNI Standards add specifics that increase consistency of data. Another noted that from the perspective of a laboratory, it might be preferable (to use ISO 17025) in the sense that it is less prescriptive, and therefore it is potentially easier to conform. The same commenter also noted that from data user standpoint, it is less preferable.

Other comments included:

- There is too much leeway and not enough clarification in ISO 17025. Considering just how regulated environmental laboratories are, I believe there would be more frustration on behalf of laboratories than the flexibility of the 17025 standards are worth.
- Use of ISO 17025 is more likely to bridge TNI/State/Drinking Water/DOE/DOD requirements, but often is vague and unclear, not written with the intent for easy implementation and consistent regulation.
- Yes and no. ISO 17025 is lacking in some things, but the TNI Standards are too cumbersome in some aspects.
- For a VERY small environmental laboratory, with a HUGE QC and process control component, a general ISO 17025 certification makes more sense.
- Some laboratories do both already - TNI is helpful in tailoring some of the 17025 requirements to the industry.
- Prefer ISO 17025 primarily as it appears to give more flexibility on meeting the same requirements. Also, the current standard is the 2nd edition and has been in place since 2005, having the appearance of being more stable.

**8. Is there anything that the TNI Standards should cover that is not already covered?**

Over half of the respondents did not have any suggestions for additional items that the TNI Standards should cover. Several commenters noted that any changes to the standards should allow flexibility for implementation, particularly for small laboratories. One

commenter noted that care should be used when generating new standards that may be more theoretically correct, but do not make a significant practical impact (e.g. possible MDL/LOD standard) or for where standards already exist (Calibration Standard vs. SW-846 CWA method requirements). Another noted that it would be beneficial for the TNI Standards to cover a broader area. Others noted that is more important to remain focused on the areas the standards currently cover. One respondent said that the standards have not have proven themselves yet in the industry as highly authoritative in the data user's viewpoint, particularly because they frequently change (relatively speaking) and people don't see them as broad, foundational standards.

Compliments on the effort to obtain and use feedback! Thank you to TNI for the assessors forum, kind contacts, etc. You all have been of great help!

Suggestions for additions to the standards included:

- Include more stack testing emission parameters, more direction on sampling requirements.
- Require certification for the utility personnel that operate instruments daily (same as stack testers).
- More requirements for technical issues (e.g. tuning practices for MS methods, more information on calibrations, best practices for dual column methods, *Manual for the Certification of Laboratories Analyzing Drinking Water* recommendations, manual Integration requirements), and not so much quality system issues.
- Additional details or guidance documents so that less of the requirements are left to the auditor's interpretations.
- A true and valid procedure for the determination of LOD's or do away with LOD's all together.
- TNI should have pricing caps and increase focus on method understanding to the same level as the quality system.
- Data review criteria, auditor criteria. It should require a data audit for each accredited method.
- Enhance the requirements for data integrity.
- What about safety?
- Less frequently and less drastic audits, for the two (2) measly tests that we are running (TSS, TDS, both with huge acceptance range). Especially since we have passed the PT successfully every six (6) months, for more than three (3) years.
- Audits should focus more on quality of data. Many laboratories do a good job on documentation, but do a very poor job on analyzing samples.
- Tiered PT sample concentrations that would more closely relate to the calibration curves and levels of analytes in our routine samples.
- Impartial oversight of the administration of this program by the state AB is needed. Currently this program does not offer dispute resolution.
- The TNI Standards should cover secondary accreditation for mobile laboratories.

- Analytical uncertainty tops the list. I realize it is listed under 5.4.6 (Vol 1, Mod 2). However, this very short paragraph only requires that the laboratory has a procedure. There should be minimum requirements for this procedure.
- TNI Standards are completely inappropriate for wastewater laboratories.
- Look at accreditation of actual chemists/analysts.
- The standards should include more requirements for independent raw data review (e.g. performed by someone from another dept) and on internal audits.

**9. What do you see as areas for improvement in the current program?**

Recommended areas for improvement generally fell within the following categories: consistency, reciprocity, proficiency testing, support for small laboratories, the standards, and state/EPA involvement.

The most frequently mentioned area for improvement was consistency, primarily consistency of processes and assessments. With regard to consistency, respondents noted that assessors often differed in their interpretation of the standards, sometimes even within the same accreditation body. One commenter noted "Of 7 NELAP accreditations we hold, no two look the same and no two use the exact same processes. From the laboratory perspective this is a large burden and very inefficient. In effect, the NELAP states are running state-specific programs – just based on the same standard. This is likely a barrier for other states entering."

As a solution to the consistency issue, several respondents suggested that TNI continue to promote third-party accreditation of laboratories to the TNI Standards. One commenter noted that not all states were equal in resources, which has a direct impact on how the programs are managed, and thus, an impact on the accredited laboratory. Another commenter stated that using third-party accreditation bodies could increase consistency among assessments, and potentially reduce costs if a single fee could be paid by the lab to one AB. While one commenter suggested that TNI should use third-party ABs in partnership with the states, another thought TNI should continue to move in the direction of an independent accreditation without states administering the program.

Concerns about reciprocity were closely related to the consistency issue. Commenters suggested that insuring reciprocity and simplifying the reciprocity procedure/paperwork would be ideal.

Another commenter noted "when applying for reciprocity, comparing primary to secondary FOAs is a monster, especially when a large amount FOAs are being requested. AB to AB spreadsheets that are easy to follow and consistent would make the application process easier for laboratories."

The frequency of proficiency testing was also a suggested area for improvement. A number of respondents favored one (1) PT per year over the current requirement for two (2). Justification for this change included, "By the time one study ends and then the time it takes

to receive the final report and perform Corrective Actions, it is time for the next study already." Another commenter noted that twice a year PT samples for a large commercial laboratory is expensive, particularly for a laboratory that is routinely at >99% acceptable. One respondent suggested that proficiency test results be available by automation. Another suggested that a uniform standard format for PT reporting (EDDs) was needed along with a uniform standard format for FOAs issued by state programs.

Support and assistance for small laboratories was a frequently mentioned concern. One commenter noted that it is very expensive to get and maintain accreditation and it would be good if the program could be tailored for smaller laboratories. Another commenter suggested a simplified standard for small laboratories so that the program does not create unnecessary burdens of time and resources. One commenter requested additional information regarding the initial accreditation steps (e.g. what to expect), particularly for small laboratories.

Concerns related to the standards were also cited as areas for improvement. Several respondents indicated they believed the standards changed too frequently, while others believed there should be a change in the technical emphasis of the standards. Suggestions included simplifying the language, issuing clarifications of the standards more quickly so that programs/assessors aren't enforcing their own interpretations of the standards. Others suggested that the standards need to be written in a way that leaves nothing to interpretation. One noted that the early versions of the standards were very specific, but later versions are much less specific and seem to lack guidance regarding acceptable practices for meeting the standards. The commenter noted that while this does allow laboratories to meet the standards in various ways and to grow and change, it also tends to allow practices that may actually bring the baseline down.

With regard to the technical emphasis of the current standards, one commenter stated that the standards should focus more on data quality, not quality system documentation. The commenter noted that a laboratory can have a great quality system, but if their data is suspect, then the quality system is of little use. Another noted that the current standards seem top heavy on paper trails and QA/QC systems instead of on the method performance/ practice level. Another suggested there should be more emphasis on technical competence of laboratories. Others stated that the Technical Manager requirements may be overly restrictive, and that the standards should include requirements for calibration verification at low and high levels, not just at a mid-point level.

Several comments focused on state and EPA participation and roles in the program. These comments included the need for more involvement from EPA and the need for a federal requirement for accreditation of wastewater laboratories to help expand the program. One commenter noted that a clearer presentation of how TNI Standards meet EPA criteria, such as EPA's *Manual for the Certification of Laboratories Analyzing Drinking Water*, is needed. Strengthen the enforcement options for the Accreditation bodies.

One commenter noted that most of the areas needing improvement are out of TNI's control, but that in order for the program to grow, more states need to participate. The commenter stated that this would allow TNI to function as it was meant to be, as a unifying national/international (with ISO) program of standards that has no reciprocation cost instead of the layered, piecemeal effect it has now because of state primacy. The commenter noted that in order for TNI to reach peak optimization, all fifty (50) states have to buy in, and state primacy either has to be dissolved or the EPA regulatory requirements must make it almost impossible for states to function without the TNI program. Another commenter suggested that many of the problems in the environmental testing business could be eliminated if the original unifying concept could be implemented. The commenter stated "My only disappointment has been in the reluctance in so many states to adopt TNI. TNI does not micromanage. It offers a framework of sound practices that should be expected from any laboratory in any state." Another noted that with only a handful of ABs, it seems like so many of the benefits of national accreditation are not able to be achieved.

In a related comment, one respondent noted that TNI should examine its role in the communication and training realm. The commenter stated that the EPA and states don't always have the resources to train the laboratory community. This provides an opportunity for TNI, with its national connections, but the training needs to be affordable, accessible (face-to-face as well as virtual), and relevant. Another stated that TNI should keep up the good offerings of webinars for training and regulatory updates. Another commented that TNI's training makes understanding and complying with the certification process as easy as possible given the complicated subject matter.

With regard to development of the standards, one commenter stated "I believe that the committees need to pay more attention to the states. If the states administering the program have issues with something, then the committees should listen closely and ask "WHY" if they don't like what the states have to say. Having formerly been an AB, I can tell you that I didn't just comment on something because I had personal issues with it (or if I did, I stated that), but often times there are regulatory reasons behind items."

# ATTACHMENT 3
# Workshop Discussion Questions and Responses

## STATE PROGRAMS AND EPA INVOLVEMENT

**Discussion Questions:**

1. **What is the best way for TNI to encourage non-NELAP states to somehow recognize NELAP accreditations in their own non-NELAP state programs?**
    - Work at the grass roots level, laboratories and laboratory associations. Assign a TNI ambassador to every non-NELAP state, identify current barriers.
    - Offer one (1) free, non-voting membership to every non-NELAP state. Offer the membership to the certification manager or his/her designee.
    - Offer a free webinar to every state to highlight the benefits to recognition, expand communication on NELAP as the gold standard, what NELAP is today.

2. **What is the best way for TNI to work with EPA to encourage/expand their involvement in national accreditation efforts?**
    - Keep the TNI Standards consistent with federal regulations.
    - Include a one hour training about TNI during the DW certification training. Could be a high level training on how the quality system and method approach can work together.
    - Re-visit the crosswalk with TNI Standards and DW certification manual and develop a high-level summary of significant differences/issues.
    - Develop a bi-annual "State of National Accreditation" report and offer briefings to EPA Regional Science and Technology Directors and Forum on Environmental Measurement.

3. **What is the best way to improve consistency and reciprocity among state NELAP programs?**
    - It is better now than it was in the old days. ☺
    - Use of third-party assessors will help.
    - Increase management oversight of assessments.
    - Promote assessor calls and assessor forum to disseminate information. Share the "State of National Accreditation" briefing noted above.
    - Expand sharing of experts among NELAP programs.

4. **How can (should) TNI address state concerns about accreditation of state laboratories?**
    - Encourage state laboratories to use non-governmental accreditation bodies (NGABs) for accreditation to the TNI Standards.
    - Promote lab competency policy (EPA) requiring certified laboratories for grants, EPA cooperative agreements, contracts.

## TECHNICAL REQUIREMENTS

**Discussion Questions:**

1. **A number of stakeholders indicated that the quality systems approach was a benefit or success to the NELAP program, however, and number of non-NELAP state respondents thought the standards should have a more method or data-focused approach. Is there a way to integrate these two views into the current program? If not, should any changes be made to the current approach?**
    - There is a misperception that these two approaches are not already integrated in the current standards. Both are emphasized.
    - TNI should better publicize how the quality systems approach supports a method based approach.
    - There is inconsistency in what the Accreditation bodies may emphasize.
    - Good internal audits cover technical method requirements.
    - Is it essential to audit every method in a large laboratory?

2. **Some respondents indicated that they would like to see a shift in the TNI Standards from the requirement for two (2) PTs per year to one (1) PT per year. This change has been debated numerous times in the past. Should it be re-considered? Why?**
    - Two groups wanted to re-open the debate. One group open to change only if there was a guarantee that non-participating states would join.
    - If we do re-open, take a different approach. Look at all the compromises that went into the two (2) PTs per year decision.
    - Will changing from two (2) PTs per year to one (1) PT per year really make a difference to the non-NELAP states?

3. **Should TNI continue to push for harmonizing the** *Manual for the Certification of Laboratories Analyzing Drinking Water* **with TNI Standards? If so, what is the most important aspect that needs to be addressed? What is the best way to do this?**
    - The TNI Standards are more than DW. Don't want to force all laboratories into DW requirements.
    - Should incorporate DW requirements as appendix or reference.
    - If incorporate into the TNI Standards, need to make DW a consensus standard. Reveal disagreements and provide opportunity to give feedback to EPA.
    - There may be more stringent DW requirements not in the TNI Standards (e.g. opening/closing CCV requirements not in TNI Standards).
    - Establish goal: DW requirements as DQOs; idea for appendix to TNI Standards; supplemental checklists; "shoulds" are in manual, not in standards.
    - Should be a long term goal. Will be a challenge.

4. **What is the best way to streamline or simplify the TNI Standards and accreditation process?**
    - Generic application
    - Guidance to help laboratories with process – mentors, tools
    - Surveillance assessments

- Better use of tools and technology for Accreditation bodies to manage programs
- Simplify checklists to help laboratories
- All above are ongoing projects

## COMMUNICATION AND OUTREACH

**Discussion Questions:**

1. **TNI has sponsored a number of efforts to provide support to small laboratories such as appointing a small laboratory advocate, developing a handbook for small laboratories seeking accreditation, and creating a Small Laboratory Advocacy Group (SLAG). However, there still seems to be concern about the difficulty small laboratories have getting accredited and about lack of support for small laboratories. What else needs to be done?**
2. **What can TNI do to provide more information on the services it provides and the benefits of accreditation, i.e., support for small laboratories, training, technical resources, etc.?**
3. **What else can TNI do to bring together diverse state programs into a coherent national framework?**

**Collective Responses:**

- It is challenging to find information on the TNI website. TNI should appoint a committee (IT or ad hoc) to explore website changes. This committee should review how some states have arranged their websites to make information more easily accessible. The committee should also consider the "tool box" format with tools in a box, flow charts, diagrams, templates, examples and other graphics to make information more readily available.

- The Advocacy Committee should focus more on marketing TNI perhaps by appointing a marketing sub-committee. This committee should develop and implement a plan to effectively use social media to attract young people. They could also Contact Marketing firms that have an interest in environmental issues to donate resources to assist with marketing and outreach.

- TNI should establish a mentoring group for small laboratories and FSMOs. This group will provide small organizations with tangible examples about how to comply with the goal of helping small organizations get past excuses that they can't do it, because they are small.

- Consistently have a seminar at NEMC to introduce newly accredited laboratories to TNI. They have to be NELAC-accredited, but don't know about TNI. There is a disconnect.

- Develop a free webinar to introduce TNI and highlight the benefits to recognition, expand communication on NELAP as the gold standard, what NELAP is today.