Request for Proposal (RFP)
Training

TNI Educational Delivery System (EDS)
Webinars and Webcasts
February 2022

BACKGROUND

The NELAC Institute (TNI) is a not-for-profit scientific voluntary consensus organization engaged in research and development whose mission is 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. The organization is managed by a Board of Directors and is governed by organizational Bylaws.

TNI's vision is a true national accreditation program, whereby all entities involved in the generation of environmental measurement data within the United States are accredited to one uniform, rigorous, and robust program that has been implemented consistently nationwide and focuses on the technical competence of the entity pursuing accreditation. TNI believes such a program will improve the quality and reliability of environmental data used by federal and state agencies.

TNI is interested in contracting with individuals and organizations to provide training in specified topics as outlined in Attachment 1. Training should impart knowledge with the goal that the person being trained will achieve some level of self-sufficiency with regard to the subject matter.

Proposals may be made to provide the training for only one course, or for multiple courses. Courses are expected to be offered online using Webinar tools with TNI staff support.

SCOPE OF WORK - TRAINING COURSES

TNI is seeking trainers (contractors) to provide formal training courses that can be anywhere from an hour to a full day or even a multiple course series over a number of months. Most courses should be offered online, but proposals with an onsite component will be considered.

TNI has prepared a list of courses (Attachment 1) that it is seeking contractors for but is open to proposals for additional courses similar in nature to the courses being requested.

FURNISHED EQUIPMENT, PROPERTY, OR INFORMATION

The following items will be provided by TNI:

- Outline and Synopsis review for suitability (not actual content);
- Course posted on TNI website and announcement emailed to TNI database;
- One-on-one training on use of Webinar tools;
- Set-up webinar – including invitations and uploaded documents. Set-up is based on Webinar Proposal/Application completed by trainer;
- Staff support as agreed upon in contract;

- Online course evaluation survey;
- Online registration and collection of fees;
- Attendance records for online courses;
- Listing of registered attendees 1 week prior to the course;
- Training certificates as purchased by attendees or negotiated at course set-up;
- Training Coordinator review of course slides sent by trainer 7-10 days prior to the course date;
- Prepare course handout from course slides; and
- Review of course content when courses are requested to be endorsed by TNI (due date may vary based on course size and content).

DELIVERABLE REQUIREMENTS

Contractor shall supply the agenda for the course, learning objectives and a copy of course materials provided to students (where available). Contractor shall retain all intellectual property rights for the course materials. If course has an onsite component, Contractor shall provide all travel and on-site costs and supply documentation of attendance records for on-site courses.

PROPOSAL FORMAT

Interested contractors should complete a proposal/application on the TNI website and provide the requested information. The proposal/application includes the following elements:

- A description of the training being proposed;
- Information about format and date(s) if known;
- Biography;
- Course outline and a synopsis; and
- A detailed cost proposal that satisfies the requirements specified in the pricing section below.

PROPOSAL DUE DATE

Proposals/applications must be received at TNI by midnight EST, March 15, 2022. Proposals/applications shall be submitted online using the TNI Educational Delivery System Proposal/Application System (http://nelac-institute.org/content/eds-app.php).

PRICE

Nothing herein shall be construed to commit TNI to pay any costs incurred by bidders in connection with preparation of a proposal, or to guarantee the procurement of any services. All prices are to be in U.S. dollars. Contractor shall furnish and provide all material, labor, supervision, equipment, and incidentals required for accomplishing the work covered by the Contract, except the work, materials, services, or equipment to be furnished by TNI. The proposal should include any fees for instructor, materials, and instructor(s) travel being requested.

TNI and the contractor may mutually agree to cancel the class(es), if fewer than 10 students are registered 1 week before the course date.

QUESTIONS

Questions must be sent to both Ilona Taunton - TNI Training Coordinator (ilona.taunton@nelac-institute.org) and Jerry Parr – TNI Executive Director (jerry.parr@nelac-institute.org).

EVALUATION CRITERIA

TNI will review all proposals that are received by the deadline in accordance with the following criteria:

- Relevance of proposal to TNI's objectives and priorities;
- Technical merit;
- Competency of the proposed staff;
- Feasibility of the proposal;
- Adequacy of the applicant's resources; and
- Cost.

The anticipated award date for any contracts is March 31, 2022 or sooner.

PAYMENT TERMS

Payment to the contractor will be on the 15th of the month following the course.

EXCEPTIONS, EXCLUSIONS, OR SPECIAL CONDITIONS

This solicitation permits the bidder to impose exceptions, exclusions, or special conditions. However, the bidder is hereby advised that any such exception, exclusion, or special condition may render your proposal non-responsive, which would preclude an award to you. Any exception, exclusion, or special condition the bidder wishes to include or impose must be fully and completely described in a written attachment to the Bidder's proposal.

TNI reserves the right to accept training proposals prior to the March 31, 2022 date that are outside of the course list (Attachment 1).

ACCEPTANCE OF PROPOSALS

TNI reserves the right to cancel this RFP or to not consider bids submitted in response to this solicitation.

Attachment 1.

Course Listing

This list was prepared by the TNI Training Opportunities Workgroup based on training survey results, emails, past operational plans, and ideas discussed in various TNI meetings.

Each course described below is in a format that might be posted on the TNI Educational Delivery System website. The descriptions below are intended to provide a Trainer with an idea of the type of course TNI is looking for, but the Trainer is encouraged to make the class their own and modify the description/synopsis as appropriate. Courses can be suggested as a series and others could be a single class.

CEUs may be provided if course complies with the requirements of TNI SOP 1-117 (https://nelac-institute.org/docs/sop-policy/sop-1-117-rev1-policy-ceu-04-07-17-final.pdf).

Note: If you are not familiar with Webex capabilities, you may contact Ilona Taunton for assistance to decide on which tools to use to teach a course.

1. Ethics and Data Integrity for Field and Plant Sampling

Whether the sampling is performed for regulatory compliance, process control or research purposes, the analytical data is used to make decisions and should be trustworthy. The sample collection process when inappropriately performed, either intentionally or unintentionally, will result in decisions based on erroneous data.

This class will address the importance and need for ethical behavior during sampling of various matrices in the field and in the plant as it pertains to the daily tasks performed by field technicians and plant operator. The discussion will also include upper management ethical conduct and responsibilities.

Learning Objectives

- Knows how to formulate an Ethics and Data Integrity policy.
- Understands the difference between intentional and non-intentional field improper practices.
- Understands the consequences of poor performance, unethical behavior or any activity that might misrepresent the quality of the organization's work.
- Familiar with examples of improper sample collection practices (i.e., erroneous sampling site, lack of field instrument calibration, improper well purging, etc.)
- Knows how to detect and deter unethical behavior.
- Understands how to address Conflict of Interest.
- Familiar with published documents regarding sample collection vulnerabilities (i.e., OIG Evaluation Report No. 2006-P-00036 (Promising Techniques Identified to Improve Drinking Water Laboratory Integrity and Reduce Public Health Risks).
- Understands the requirements related to ethics and data integrity in Sections 4.2.8 and 5.2.2.2 of the FSMO-V1-ISO-2014-Rev.2.0: General Requirements for FSMOs standard.

Recommended Participants: FSMO Assessors, Operators, field personnel, and laboratory personnel.

Suggested length: 4 hours

2. Managing Your Proficiency Testing Program

This webinar will provide a comprehensive review of the Proficiency Testing requirements that apply to laboratories as described in Volume 1, Module 1, Volume 2, module 2, and Volume 3 of the TNI Environmental Laboratory Standard.

Learning Objectives

- Understands the requirement to participate in PT studies for each Field of Proficiency Testing (FoPT) adopted by TNI for which the laboratory seeks to obtain or maintain accreditation.
- Knows how to schedule PT studies and how to use an accredited PT Provider accredited to Volume 3 of the TNI Environmental Laboratory Sector Standard.
- Knows the requirements for analyzing PT samples,
- Knows how to report PT study results.
- Knows how to report PT study results to AB.
- Understands how and when to use a single method for multiple technologies.
- Understands the concepts of a PT Reporting Limit and how to correctly report results to the PTRL.
- Knows record keeping requirements.
- Knows how to schedule PT studies and how to maintain accreditation.
- Knows the corrective action process for PT samples.
- Understands the suspension, revocation, and reinstatement procedure employed by the AB for failures on PT samples.

Suggested length: 4 hours

3. Training: Beyond the Demonstration of Capability

Laboratories must implement procedures for establishing that personnel are adequately experienced in the duties they are expected to carry out, and that staff are receiving any needed training. While most laboratories are focused on demonstrating *capability*, they often fall short of demonstrating *competence*. This course will focus on how laboratories can create a training program that will meet all training requirements in V1M2 of the TNI Standard and help ensure that laboratory staff are competent to perform their assigned duties.

Learning Objectives

- How to formulate training goals.
- How to identify training needs.
- How to provide training to personnel.
- How to evaluate effectiveness of training.
- How to document training.
- How to maintain records of competence, educational and professional qualifications, training, skills, technical and experience.
- Basic Data Integrity training requirements.
- Defining "appropriate supervision"? (V1M2 §5.2.1)
- Overview of Initial Documentation of Capability (IDOC) and Ongoing Demonstration of Capability (ODOC) procedures and documentation. *(Note to Trainer: Check with Expert Committees to make sure there are no conflicts with what is presented.)*

Suggested length: 4+ hours

4. Keeping the Chain of Measurement Traceability Intact to Ensure Reliable Data

The laboratory is required to have procedures for achieving traceability of measurements. The chain of traceability can be weak when pieces of meta data are missing; worse yet the chain can be broken when links are missing all together. This class will identify the components (i.e., Certificate of Analysis, Receipt, Usage, Prep and Disposal records, etc.) that have the potential to comprise the chain of traceability for testing laboratories as discussed in Section 5.6 (Measurement Traceability) of EL-V1M2-2016-Rev2.1: Quality Systems General Requirements.

Learning Objectives

- Understands the overall traceability requirements as discussed in Section 5.6 of EL-V1M2-2016-Rev2.1: Quality Systems General Requirements.
- Knows how to document the traceability of External Calibration to Reference Standards (i.e., Thermometers, weights).
- Knows how to document the traceability of the Calibration for Reference Standards when SI units are not available.
- Knows how to document the traceability of Calibration for Reference Materials (i.e., SRMs, CRMs, Primary standards, CRCs, etc.) and for Working (intermediate) Standards.
- Knows how to document the traceability of Extended Calibration for Reference Materials (Internal or AB specified).
- Knows how to document the traceability for Solvents, Reagents, DI Water, Chemicals, Gases, Media, and DI/Buffered Water.
- Knows how to document the traceability for Instrument, Equipment, and Supplies.
- Learns how to develop documented traceability schemes and information retention.
- Learns how to develop Identity traceability labeling schemes.
- Knows how to document the traceability for Transport, Storage and Disposal of samples.
- Knows how to document the Internal Testing Measurement of Uncertainty Traceability – Catherine will look into this and possibly re-word.
- Learns to identify and document additional traceability components (i.e. Internal and External Reference Documents, Personnel Signature cards, Internal and external maintenance records, etc.).

Suggested length: 2-3 hours

5. Brown Bag 12: Accommodation and Environmental Conditions Relative to Analytical Activities

This class will look at laboratory facilities, including, but not limited to energy sources, lighting, and environmental conditions (temperature, humidity, biological sterility, dust, electromagnetic disturbances, radiation, sound, and vibration levels), that facilitate/impact correct performance of the tests. Include discussion on environmental conditions not contributing to invalidation of the results or adversely affecting the required quality of any measurement.

The following topics will be covered:

- Monitoring, controlling, and recording environmental conditions as required by the relevant specifications, methods and procedures or where they influence the quality of the results. Includes, but not limited to, clean rooms and special requirements for metals and microbiology.
- Cessation of testing activities when the environmental conditions jeopardize the results of the tests.
- Effective separation between neighboring areas in which there are incompatible activities to prevent cross-contamination – provide examples of competing areas.

- Control of access to and use of areas affecting the quality of the tests is controlled (security controls); include good housekeeping.

Learning Objectives:

- Knows what to monitor to determine environmental condition issues.
- Understand impact of environmental conditions on testing and data quality.
- Understands documentation and record keeping requirements.
- Understands when corrective actions are needed.

Suggested length: 1- 1.5 hours

6. Managing Laboratory Support Equipment – Calibration, Verification, and Maintenance

Most laboratories have more balances, ovens, water baths, and thermometers than they do GC/MS systems, yet comparatively little attention is paid to the calibration, verification, and maintenance of support equipment as opposed to analytical equipment. At the end of the day, however, the accuracy of your analytical result may depend more on your pipette than your triple-quad. This course will teach you everything you need to know to keep your support equipment within specifications and working as designed.

Understand how to establish a support equipment maintenance program.
Know how to document support equipment maintenance.
Understanding how to address requirements vs. recommendations.

Basic overview of support equipment lifecycle and basic reliability operational assessment.
How to determine whether the equipment is healthy-reliable.

Understand the impact on final results when support equipment does not meet specifications.

Learning Objectives

- Identify what qualifies as support equipment (V1M2 – Section 5.5.13.1).
- Understand how to uniquely identify or name support equipment.
- Understand how often support equipment must be verified.
- Understand how often support equipment must be calibrated.
- Understand the difference between verification and calibration.
- Understand when/whether brand new equipment should be verified/calibrated.
- Understand how to appropriately document verification/calibration.
- Understand how to document daily checks of support equipment.
- Know what traceability means, and how the concept applies to the environmental laboratory.
- Learn the distinction between reference standards and reference materials.
- Learn tips and techniques for performing verifications/calibrations in-house.
- Understand the microbiology-specific support equipment requirements (V1M5 Section 1.7.3.7.b).

Suggested Length: 4 – 6 hours

7. Brown Bag 13: Handling Samples and Sample Integrity

This class will cover requirements from Volume 1 Module 2 Section 5.8 of the TNI Environmental Laboratory Standard.

Learning Objectives:

- Identify what is a sample or subsample.
- Understand how to uniquely identify a sample.
- Understand what constitutes an abnormality or departure from normal or specified conditions.
- Understand container and preservation requirements.
- Knows Chain of Custody form requirements.
- Understand what constitutes proper storage, handling, and preparation.
- Understand how to use ID codes to document and/or provide traceability to preservation, subsamples, extracts, digestates, sample containers.
- Understand linking of field codes and laboratory codes.
- Understand the element of an appropriate sample acceptance policy including sample rejection or documentation of any decision to proceed with analysis.
- Understand documentation and record keeping requirements.
- Identify elements required for receipt of sample containers.
- Understand document retention protocol.
- Understand difference between legal chain of custody and routine sample handling.
- Understand sample storage protocols and means of disposal of samples, digestates, leachates and other extracts or sample preparations.

Suggested Length: 4 hours.

8. Essential Wastewater Analyses

This series of courses covers the basic essential laboratory analyses performed on wastewater samples to evaluate the nature of the sample and the performance of the treatment process.

For each category, at a minimum the following is discussed:

- Brief wastewater program requirements
- A brief description of the theory behind the method
- What the analysis measures
- How the measured result relates to wastewater quality
- An overview of how the analysis is performed
- Basic quality control
- Some tips for optimal method performance
- Some common issues with method performance, and how they may be avoided or overcome.

The series is organized into four categories with specific methods in each category as shown below.

Demand and Organic Constituents

- Biochemical Oxygen Demand (BOD)
- cBOD
- Chemical Oxygen Demand
- Total Organic Carbon
- Oil and Grease (HEM and SGT-HEM)

Residues

- Total Solids
- Total Suspended Solids
- Total Dissolved Solids

- Total Volatile Solids
- Total Fixed Solids

Nutrients

- Ammonia
- Total Kjeldahl Nitrogen
- Nitrite/Nitrate
- Total Phosphorus

Physical Properties

- Turbidity
- Odor
- Color
- pH
- Temperature
- Conductivity
- Residual Chlorine

After discussing individual methods, the typical relationships between some of the inter-related parameters may be explored. Relationships between COD and BOD, TSS and BOD, and others are discussed.

Suggestion: Four class series
- Demand and Organic Characteristics
- Solids (Residues)
- Nutrients
- Physical Properties