



## The NELAC Institute (TNI) Position Statement Proficiency Testing Program

Every environmental testing laboratory should incorporate the TNI Proficiency Testing Program into its quality or management system.

### INTRODUCTION

Proficiency Testing (PT) is an integral part of The NELAC Institute's (TNI's) programs: the National Environmental Laboratory Accreditation Program (NELAP) and the National Environmental Field Activities Program (NEFAP). It is used to assist laboratories, their clients, regulators and accreditation bodies in evaluating a laboratory's performance. Proficiency Testing provides an independent, objective evaluation of the data being created in laboratories and it serves as a periodic, cost effective check of laboratory performance between onsite assessments. Laboratory is defined as a body that tests and includes, but is not limited to, fixed-base laboratory facilities, mobile laboratories and Field Sampling and Measurement Organizations.

### BACKGROUND

TNI defines Proficiency Testing as a means of evaluating a laboratory's performance under controlled conditions relative to a given set of criteria through analysis of unknown samples provided by an external source. Successful participation in proficiency studies provides an external validation to a laboratory's internal quality management program.

The benefits of TNI's PT program include:

- A demonstration and confirmation of ongoing competence of a laboratory.
- An avenue for evaluation of new methods or technologies by a laboratory.
- An ongoing evaluation of analytical processes at a laboratory.
- Identification of testing problems at a laboratory.
- A tool for identification of continuous improvement activities for a laboratory.
- Education and training of laboratory analysts at a laboratory.
- Increased confidence in the quality of a laboratory's performance.
- Satisfying clients', regulators', and accreditation bodies' needs for demonstrated and documented laboratory competence.
- Assurance that the PT samples laboratories use have undergone rigorous homogeneity, stability and verification testing and are uniquely applicable to environmental testing.

The TNI PT program consists of:

- A PT Expert Committee that establishes the requirements for proficiency testing.
- A PT Program Executive Committee that manages the implementation of the program.

- PT Provider Accreditors that accredit organizations as PT Providers.
- Private and public sector PT Providers that manufacture and provide PT samples and evaluate the results.

Fields of Proficiency Testing (FoPTs) are analytes for which a laboratory is required to successfully analyze a PT sample in order to obtain or maintain accreditation, collectively defined as: matrix, technology/method, analyte. The corresponding matrices, analytes, concentration ranges, and acceptance limits adopted for the PT program are organized into tables and posted on the TNI website.

**RECOMMENDATIONS**

- The adoption of TNI’s PT program is a cost effective assessment tool for periodically monitoring a laboratory’s testing competence to provide the laboratory, client, regulator, or accreditation body with confidence in an organization’s data.
- TNI should continue to promote the adoption of its PT program by all environmental testing organizations.

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**RESOURCES**

1. Wruck, Dan and Ingrid Flemming, *Educational Aspects of Proficiency Testing Program*. 2007.
2. ILAC, *Benefits for Laboratories participating in Proficiency Testing Programs*. 2008.
3. The NELAC Institute, *Management and Technical Requirements for Laboratories Performing Environmental Analysis, EL-V1-2009*. 2009
4. The NELAC Institute, *General Requirements for Accreditation Bodies Accrediting Environmental Laboratories, EL-V2-2009*. 2009
5. The NELAC Institute, *General Requirements for Environmental Proficiency Test Providers, EL-V3-2009*. 2009
6. The NELAC Institute, *General Requirements for an Accreditor of Environmental Proficiency Test Providers, EL-V4-2009*. 2009
7. The NELAC Institute, *General Requirements for Field Sampling and Measurement Organizations, FSMO-V1-ISO 2014-Rev2.0*
8. The NELAC Institute, *General Requirements for Accreditation Bodies Accrediting Field Sampling and Measurement Organizations, FSMO-V2-ISO-2014-Rev.2.0*

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