



ISO/IEC 17025, NELAC, and NELAP

ISO/IEC 17025

The International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) have developed the ISO/IEC 17025 standard, "General Requirements for the Competence of Testing and Calibration Laboratories," December 1999. This standard will be used by accrediting bodies worldwide for assessing laboratory competence. ISO/IEC 17025 replaces ISO/IEC Guide 25: 1990. Accreditation bodies that are currently using standards based on Guide 25 will soon begin the process of revising performance standards to reflect requirements contained in ISO/IEC 17025.

Summary of Changes from Guide 25:

- Includes a section on Management Requirements that is modeled after ISO 9001, but tailored to laboratory operations
- Explicitly states that laboratories are responsible for identifying clients' needs and selecting methods that are capable of meeting them
- Addresses document control considerations more clearly
- Places emphasis on using internal audits to identify potential problems and areas for improvement
- Adds emphasis to specific technical requirements including: reporting analyst judgments and interpretations, selecting methods, using laboratory-developed or non-standard methods, and validating methods



...because the right decisions require quality data

NELAC

The National Environmental Laboratory Accreditation Conference (NELAC) is an association of State and Federal agencies formed to establish and promote environmental laboratory performance standards (the NELAC standards) based on ISO/IEC Guide 25. NELAC's goal is to foster the generation of environmental laboratory data of the quality necessary to support environmental decision-making. NELAC encourages the private sector to become involved in this effort by attending open semiannual NELAC meetings, participating on NELAC committees, and joining the Environmental Laboratory Advisory Board (ELAB), a federally chartered advisory committee that provides advice to EPA and NELAC.

NELAP

The National Environmental Laboratory Accreditation Program (NELAP) is the program that implements the NELAC standards. State and Federal agencies, coordinated by EPA, can serve as NELAP accrediting authorities (AA). Accreditation by any AA is mutually recognized by the other State and Federal AAs. NELAP currently recognizes 11 State AAs, including:

- California
- Florida
- Illinois
- Kansas
- Louisiana
- New Hampshire
- New Jersey
- New York
- Oregon
- Pennsylvania
- Utah

NELAC and NELAP benefit Navy by:

- Promoting a uniform set of standards by which environmental data are produced, thereby promoting data quality improvements, data comparability, and reciprocity across States, agencies, and regulatory programs
- Establishing baseline expectations for environmental data quality, which will reduce the effort needed to define project-specific requirements
- Reducing the number of laboratory assessments that need to be performed by Navy
- Reducing the number and costs of accreditations that Navy laboratories need to maintain

For more information, contact the NELAC website: <http://www.epa.gov/ttn/nelac>