

NJDEP Certification Program for Field Analytical Methods

The New Jersey Department of Environmental Protection (NJDEP) is committed to streamlining the site investigation and remediation process at contaminated properties without compromising data quality and reliability. The Triad approach integrates systematic planning, dynamic work plan strategies, and real-time measurement techniques. It recognizes and seeks to manage the uncertainties involved in generating representative analytical data obtained from heterogeneous environmental matrices. Field analytical methods are a subset of real-time measurement techniques. The use of the techniques can result in more time and cost effective site characterization and cleanup.

The NJDEP has evaluated the Technical Requirements for Site Remediation, N.J.A.C. 7:26E, and has determined that the concepts embodied in the Triad approach can be implemented within the framework of this rule. Furthermore, the NJDEP's Office of Quality Assurance (OQA) has the authority to certify real-time measurement techniques performed in the field using the authority granted at N.J.A.C 7:18, "Regulations Governing the Certification of Laboratories and Environmental Measurements."

Effective March 1, 2004, the NJDEP added the following analytical techniques to its Environmental Laboratory Certification Program to support all real time measurements being performed on behalf of the NJDEP:

- Field Immunoassay
- Field gas chromatography
- Field gas chromatography/mass spectrometry
- Field X-ray fluorescence spectroscopy

Examples of each of these real time measurement methods can be found in the United States Environmental Protection Agency's Test Methods for Evaluating Solid Waste Physical/Chemical Methods (also known as SW-846).

The NJDEP currently offers certification for the real time measurement methods listed in USEPA SW846 for immunoassay, gas chromatography, gas chromatography - mass spectrometry or x-ray fluorescence, or for standard operating procedures (SOPs) for these types of real time measurements that are specific to the practices of each business entity. Additionally, the NJDEP may add additional categories of real time measurements to the laboratory certification program in the future.

These real time measurement methods will support the use of the Triad process for sites undergoing investigation and remediation within the Site Remediation and Waste Management Program, as well as other remedial activities being conducted on behalf of the Department.

All business entities (i.e. corporation, engineering firm, environmental firm, laboratory) performing these real time measurements must be granted New Jersey environmental laboratory certification using the rules at N.J.A.C. 7:18, "Regulations Governing the Certification of Laboratories and Environmental Measurements." The NJDEP has initiated the following plan to implement the addition of these analytical methods.

Effective immediately, the OQA is accepting applications for certification. Applications may be obtained from:

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By May 1, 2004, the NJDEP will inform all applicants of the requirements necessary for certification. These will include at least a detailed SOP containing information on method detection limits, dynamic range, precision, accuracy, calibration, quality assurance, and other operational procedures used by each business entity to generate these real time measurement data.

By August 1, 2004, only business entities that have submitted an application and SOP, approved in writing by the OQA, will be eligible for certification by January 1, 2005.

Effective January 1, 2005, only business entities that have received NJ environmental laboratory certification can use these real time measurement methods for regulatory decision-making purposes.

As part of the application approach, documentation is required to demonstrate that personnel performing real-time measurements have the same education and experience as those performing similar laboratory-based analyses (see N.J.A.C. 7:18-2.10). On-site audits to evaluate the use of real time measurements may also be conducted prior to the issuance of certification.

For questions about the use of the Triad process by the NJDEP please visit the NJDEP website at <http://www.nj.gov/dep/srp/triad/>. For questions about environmental laboratory certification for real-time measurements, please contact Stuart Nagourney or your environmental laboratory certification officer from the OQA at 609-292-3950.