

The NIST Policy on Traceability as Related to Radionuclide Measurements

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The National Institute of Standards and Technology (NIST) has recently released its policy on traceability. The NIST policy adopts the ISO VIM definition of traceability for its use, and places the responsibility of evidence with those that claim traceability of measurement values. Furthermore, it places the responsibility of verifying the claim of traceability with those that will use the measurement values. Interpretation and application of the NIST policy on traceability of radionuclide measurement values will be questioned and discussed in this presentation.

NIST Policy on Traceability

Introduction

The mission of NIST is to strengthen the U.S. economy and improve the quality of life by working with industry to develop and apply technology, measurements, and standards. To help meet the needs of U.S. industry and the nation for measurements and standards, NIST provides calibrations, standard reference materials, standard reference data, test methods, proficiency evaluation materials, measurement assurance programs, and laboratory accreditation services that may be used as part of a program for establishing traceability of results of measurements or values of standards. NIST, however, has neither the statutory authority nor responsibility to define, specify, assure, or certify the traceability of results of measurements or values of standards except those that NIST itself provides, either directly or through an official program or collaboration with NIST. To clearly document the NIST role with respect to traceability, NIST has adopted this:

Statement of Policy

To support the conduct of its mission and to ensure that the use of its name, products, and services is consistent with its authority and responsibility, NIST resolves to:

1. Adopt for its own use and recommend for use by others the definition of traceability in the most recent version of the *International Vocabulary of Basic and General Terms in Metrology*, "property of the result of a measurement or the value of a standard whereby it can be related to stated references, usually national or international standards, through an unbroken chain of comparisons all having stated uncertainties." (ISO VIM, 2nd ed., 1993, definition 6.10)
2. Establish traceability of the results of its own measurements and values of its own

standards and of results and values delivered to customers in NIST calibration and measurement certificates, operating in accordance with the NIST system for assuring quality in the results of measurements and values of standards.

3. Communicate where appropriate its views that (a) providing support for a claim of traceability of the result of a measurement or value of a standard value is the responsibility of the provider of that result or value, whether that provider is NIST or another organization; and (b) assessing the adequacy of such a claim is the responsibility of the user of that result or value.
4. Communicate where appropriate that NIST does not define, specify, assure, or certify traceability of the results of measurements or values of standards except those that NIST itself provides, either directly or through an official program or collaboration with NIST, especially where claims expressing or implying the contrary are made.
5. Collaborate on development of standard definitions, interpretations, and recommended practices with organizations that have authority and responsibility for variously defining, specifying, assuring, or certifying traceability.
6. Develop and disseminate technical information related to traceability and conduct coordinated outreach programs on issues of traceability and requirements therefor.
7. Assign responsibility for oversight of implementation of the NIST policy on traceability to the NIST Deputy Director or designee.