Survey of Quality Control Practices at Radioanalytical Laboratories

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ABSTRACT

Numerous documents offer guidance concerning (1) the calibration of radiation detection instrumentation and (2) the charting practices of quality control parameters for radioanalytical laboratories. However, the guidance is general in nature and does not offer specific details concerning (1) the necessary components of a calibration for the different types of detectors or (2) the frequency of the calibrations and the instrument source checks.

Presented herein are the preliminary results of a survey distributed to the attendees of the 1994 Canberra Users Group Meeting and the 40th Annual Conference on Bioassay, Analytical, and Environmental Radiochemistry. The survey was designed to determine the calibration components of gas-flow proportional detectors, liquid scintillation counters, and gamma and alpha spectroscopy systems. Additionally, the methods for establishing control chart means and standard deviations are examined.