

Quality Assurance for

Environmental

Measurements

Taylor/Stanley
editors

STP 867



QUALITY ASSURANCE FOR ENVIRONMENTAL MEASUREMENTS

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on Water and Committee D-22 on
Sampling and Analysis of
Atmospheres
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Foreword

The Conference on Quality Assurance for Environmental Measurements was held in Boulder, Colorado, on 8–12 August 1983. The conference was sponsored by ASTM Committee D-19 on Water and Committee D-22 on Sampling and Analysis of Atmospheres. The Environmental Protection Agency and the National Bureau of Standards were co-sponsors.

J. K. Taylor, National Bureau of Standards, and T. W. Stanley, Environmental Protection Agency, served as symposium chairmen and have edited this publication.

Related ASTM Publications

Statistics in the Environmental Sciences, STP 845 (1984), 04-845000-16

Sampling and Analysis of Rain, STP 823 (1984), 04-823000-17

Toxic Materials in Atmosphere: Sampling and Analysis, STP 786 (1982),
04-786000-17

Air Quality Meteorology and Atmospheric Ozone, STP 653 (1978),
04-653000-17

Definitions for Asbestos and Other Health-Related Silicates, STP 834 (1984),
04-834000-17

A Note of Appreciation to Reviewers

The quality of the papers that appear in this publication reflects not only the obvious efforts of the authors but also the unheralded, though essential, work of the reviewers. On behalf of ASTM we acknowledge with appreciation their dedication to high professional standards and their sacrifice of time and effort.

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The ideal facility for assessing the quality of radon measurements at environmental levels consists of: (1) an instrument whose response to radon and its progeny is determined from measurements of a certified or standard ^{226}Ra source, and (2) a calibration room with a known radon concentration. The linkage between these two elements and additional quality control requirements are discussed here for some Environmental Measurements Laboratory radon measurements programs. Addeddate. 2011-09-08 14:47:13. Quality Assurance in Environmental Restoration. Projects. Mr. Tom Koepp, QA Manager, Visionary Solutions, LLC. Mr. Keith Aleckson, Parsons, Senior QA Engineer. Environmental data are any measurements or information that describe environmental processes or conditions or the performance of environmental technology. Introduction continued. Environmental data include (e.g., remediation) sampling and analysis (SAP) data generated from field site preparation activities, geographic information, site survey data, information about construction activities, industrial processes, decommissioning and decontamination (D&D), data generated from site and facility inspection, and monitoring activities, and data generated from field and measurement activities. EG0700540 Quality Assurance for Environmental Radon Measurements by LR115. Nuclear Track Detectors. M.A.Gomaa. This paper summarizes some activities to establish quality assurance of the environmental radon measurements using LR-115 detectors with can technique. The quality assurance program, described in this paper, can be applied in order to reduce radon concentration measurement uncertainty, which Have a significant impact on the results of radon dosimetry. VIII Radiation Physics & Protection Conference, 13-15 November 2006, Beni Sueif - Fayoum, Egypt THEORETICAL ASPECTS. Environmental data allows us to monitor the constantly changing environment that we live in. It allows us to study trends and helps us to develop better models to describe processes in our environment and they, in turn, can provide information to improve management practices. Such tests take no consideration of the system state at which each measurement is made, and provide the user with little contextual information on the probable cause for a measurement to be flagged out of range. We propose the use of data science techniques to tag each measurement with an identified system state. State tagging application for environmental data quality assurance. NERC Environ. Inform.