

## Correction to

# American National Standard Radiation Protection Instrumentation Test and Calibration, Portable Survey Instruments

Sponsored by

**National Committee on Radiation Instrumentation, N42**

*Correction Sheet*

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**Page 6, Table 1— Standard conditions, should read as follows:**

**Table 1—Standard conditions**

Influence quantities	Acceptable range for standard test conditions
Warm-up time	>1 min or manufacturer's specification
Relative humidity	Ambient $\pm 10\%$ , not to exceed 75%
Ambient temperature	20–24 $^{\circ}$ C
Atmospheric pressure	70–106 kPa
Background ambient photon radiation (external)	2.5% of full scale of the range or decade under test, but nominally should not exceed 0.5 $\mu$ Gy/h ( $\mu$ 50 rad/h), referenced to air
Non-ionizing electromagnetic field of external origin	Less than 50% of the lowest value that causes interference
Magnetic induction of external origin	Less than twice the induction due to the earth's magnetic field
Controls	Set for normal operation per site procedure or manufacturer's recommendations
Contamination by radionuclides	Contamination shall be low and should be less than limits for total activity listed in NRC Reg. Guide 1.86 [B20]
Reference point	Effective center <sup>a</sup>

a.For larger area beta or alpha detectors, the detector source response factor should be based on contact with the detector "face."

**Page 9, 4.2.1.5 Neutron dose equivalent instruments, should read as follows:**

Instruments designed to read out in units of neutron dose equivalent or dose equivalent rate shall be calibrated as in 4.2.1.1 through 4.2.1.4; except that the calibration accuracy for ranges from 0–100  $\mu$ Sv/h or 0–100  $\mu$ Sv (0–10 mrem/h or 0–10 mrem) shall be  $\pm 30\%$ , and the calibration accuracy for ranges from 100  $\mu$ Sv/h or 100  $\mu$ Sv (10 mrem/h or 10 mrem) and above shall be  $\pm 20\%$ .

**Page 12, 4.7, item c) should read as follows:**

The results of periodic and at least monthly performance testing.

Page 15, Table 3—Calibration field accuracies<sup>a</sup> and quantities, should read as follows:

**Table 3—Calibration field accuracies<sup>a</sup> and quantities**

Radiation type	Accuracy (%)	Quantity
Gamma	5	Deep dose equivalent
X-ray	5	Deep dose equivalent
Neutron	10	Deep dose equivalent
Beta	10	Shallow dose equivalent
Alpha contamination	10	Activity/unit area
Beta contamination	10	Activity/unit area

<sup>a</sup>Accuracies are for dose rates greater than 100  $\mu\text{Gy/h}$ , 100  $\mu\text{Sv/h}$ , or  $10^3 \text{ Bq/cm}^2$  (10 mrad/h, 10 mrem/h or  $6 \times 10^4 \text{ dpm/100 cm}^2$ ).