

## RAD-60 CALIBRATION PROCEDURE

Procedure #: RAD60R-001 Rev. 0

SATISFACTORY:

PERFORMED BY \_\_\_\_\_ DATE

UNSATISFACTORY:

PERFORMED BY \_\_\_\_\_ DATE

COMMENTS:

REVIEWED BY (STAFF): \_\_\_\_\_ DATE

## 1.0 PURPOSE

The purpose of this Calibration Procedure is to verify the calibration of the RADOS RAD-60R dosimeter and functions as per design. This procedure shall satisfy the acceptance criteria set forth to establish a traceable calibration.

## 2.0 REFERENCES

- 2.1 RADOS RAD-60/62 Service Manual Doc. No. 20933961  
Version 1.1 08/97
- 2.2 Calibration Certificate for Source: Cs<sup>137</sup> with sufficient dose rate  
between 20 mR/hr – 36 R/hr

## 3.0 DEFINITIONS

- 3.1 ADR-1/60 Software: RADOS software required for Calibration

## 4.0 RESPONSIBILITIES

- 4.1 Test performer shall attach all printouts (identified with the  
corresponding step number) to this test.

## 5.0 PREREQUISITES

- 5.1 Install a new “AAA” battery in the RAD-60R dosimeter.
- 5.2 The calibration of the RAD-60R dosimeter is performed using a  
dosimeter reader and ADR-1/60 software.
- 5.3 Ensure power is applied to the ADR-1 reader.

## 6.0 PROCEDURE

- 6.1 Place the RAD-60R dosimeter in the ADR-1 reader dosimeter slot.
- 6.2 From the Dosimeter reader control button menu, open the STATUS screen or  
ADR-1/60 Configuration screen.
- 6.3 IN the CAL COEFF field on the screen, first enter the units for calibration (S =  
Sieverts, or R = REM). Then enter the dose rate for the calibration field.  
EXAMPLE R1000 = dose rate of 1 R/hr.

- 6.4 Depress the WRITE command to store these values in the dosimeter.
- 6.5 The software will request conformation of the values.
- 6.6 Depress the OK to start the calibration process.
- 6.7 Remove the dosimeter from the reader and place in the calibration beam within 90 seconds. The dosimeter display will read CAL.
- 6.8 An audible beep will occur for each 256 pulses detected by the dosimeter. Let the dosimeter remain in the calibration beam until the end of the calibration cycle. At the end of the calibration, a one second length audible signal is given. The length of time is dependent upon the dose rate field.
- 6.9 Remove the dosimeter from the calibration beam.
- 6.10 Recheck the dosimeter calibration by placing in calibration beam and check points of calibration interest.
- 6.11 Record dosimeter readings for each point of calibration interest on calibration sheet.



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