

University of Maryland Baltimore

Radiation Safety Procedure

Procedure Number: 3.2

Title: Calibration of Radiation Monitoring Instruments

Revision Number: 0

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Technical Review and Approval:

Radiation Safety Officer

Date: _____

Radiation Safety Committee Approval:

Chair, Radiation Safety Committee

Date: _____

PROCEDURE 3.2 – CALIBRATION OF RADIATION MONITORING INSTRUMENTS

1.0 Purpose:

This procedure provides instructions for performing routine and special calibrations on portable radiation monitoring instruments for use in UMB facilities.

2.0 Scope:

This procedure applies to all monitoring instruments used to provide quantitative radiation measurements supporting the UMB radiation safety program. This procedure does not apply to permanently installed radiation monitoring instruments, such as those that provide input to access control interlocks associated with hazardous areas. This procedure does not apply to individual monitoring devices that have no adjustable calibration function, such as thermoluminescent dosimeters and pocket ionization chambers, but does apply to electronic dosimeters that may be worn by an individual to provide an indication of individual dose.

3.0 Procedure:

- 3.1. EHS shall establish a program to ensure all radiation monitoring instruments are calibrated for the radiation(s) measured no less frequently than once every twelve months [D.501(b)]. The most recent calibration date should be indicated on each instrument so that the user can verify the calibration prior to use.
- 3.2. EHS and/or the Authorized User shall establish:
 - Capabilities to perform appropriate instrument calibrations; or
 - Working relationships with appropriate supporting calibration service suppliers to meet the instrument calibration needs.
- 3.3. Instruments that are found to be out of calibration shall be removed from service.
- 3.4. EHS and/or the Authorized User shall collect instruments that are out of calibration or approaching the calibration due date and ensure the instruments are calibrated, repaired, or retired, as appropriate.
- 3.5. Upon return of the instrument(s), EHS or the Authorized User shall perform appropriate response checks to ensure the instruments are performing within expected parameters.

4.0 Records and Reports:

4.1 Records

EHS and/or the Authorized User shall maintain records of radiation monitoring instrument calibrations and repairs in accordance with Procedure 1.2, *Radiation Safety Records*.

4.2 Reports

None.

5.0 References:

COMAR 26.12.01.01, Part D, Section 501

UMB Radiation Safety Program

Maryland Radioactive Material License MD-07-014-01

USNRC Regulatory Guide 10.8, "Guide for the Preparation of Applications for Medical Use Programs"