Irish National Accreditation Board

Accreditation Certificate

Radiological Protection Institute of Ireland

3 Clonskeagh Square, Clonskeagh Road, Dublin 14

Calibration Laboratory

Registration number: **091C**

is accredited by the Irish National Accreditation Board (INAB) to undertake calibration as detailed in the Schedule bearing the Registration Number detailed above, in compliance with the International Standard **ISO/IEC 17025:2005 2nd Edition**

"General Requirements for the Competence of Testing and Calibration Laboratories"

(This Certificate must be read in conjunction with the annexed Schedule of Accreditation)

Date of award of accreditation: **29:08:2003**

Date of last renewal of accreditation: **17:04:2008**

Expiry date of this certificate of accreditation: **29:08:2013**

This Accreditation shall remain in force until further notice subject to continuing compliance with INAB accreditation criteria, ISO/IEC 17025 and any further requirements specified by the Irish National Accreditation Board.

Manager: Tom Dempsey — Mr Tom Dempsey

Chairperson: Máire C Walsh — Dr Máire Walsh

Issued on 17 April 2008

Organisations are subject to annual surveillance and are re-assessed every five years. The renewal date on this Certificate confirms the latest date of renewal of accreditation. To confirm the validity of this Certificate, please contact the Irish National Accreditation Board.

INAB is a signatory of the European co-operation for Accreditation (EA) Testing Multilateral Agreement (MLA) and the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement.

Irish National Accreditation Board

Wilton Park House, Wilton Place, Dublin 2, Ireland
Tel +353 1 607 3003 *Fax* +353 1 607 3109
E-mail inab@inab.ie *Web* www.inab.ie

Schedule of Accreditation

ISO 17025 INAB ACCREDITED CALIBRATION DETAILED IN SCOPE REG NO.091C

(Annex to Accreditation Certificate)

Permanent Laboratory:

Category *A*

RADIOLOGICAL PROTECTION INSTITUTE OF IRELAND

Calibration Laboratory

Initial Accreditation Date :	**29-June-1998**
Postal Address:	3 Clonskeagh Square, Clonskeagh Road, Dublin 14
Telephone:	+353 (1) 2697766
Fax:	+353 (1) 2697437
E-mail:	lmckittrick@rpii.ie
	dpollard@rpii.ie
Contact Name:	Mr Leo Mc Kittrick
	Mr David Pollard
Facilities:	**Public calibration service**

Irish National Accreditation Board

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Schedule of Accreditation

Permanent Laboratory:
Category A

THE IRISH NATIONAL ACCREDITATION BOARD (INAB) is the Irish body for the accreditation of organisations including laboratories.

Laboratory accreditation is available to testing and calibration facilities operated by manufacturing organisations, government departments, educational institutions and commercial testing/calibration services. Indeed, any organisation involved in testing, measurement or calibration in any area of technology can seek accreditation for the work it is undertaking.

Each accredited laboratory has been assessed by skilled specialist assessors and found to meet criteria which are in compliance with ISO/IEC 17025 or ISO/IEC 15189 (medical laboratories). Frequent audits, together with periodic inter-laboratory test programmes, ensure that these standards of operation are maintained.

Calibration Categories:

Category A: Permanent calibration laboratory where the laboratory is erected on a fixed location for a period expected to be greater than three years.

Category B: Site calibration that is performed by staff sent out on site by a permanent laboratory that is accredited by the Irish National Accreditation Board.

Category C: Site calibration that is performed in a site/mobile laboratory or by staff sent out by such a laboratory, the operation of which is the responsibility of a permanent laboratory accredited by the Irish National Accreditation Board.

Category D: Site calibration that is performed on site by individuals and organisations that do not have a permanent calibration laboratory. Calibration may be performed using

(a) portable test equipment
(b) a site laboratory
(c) a mobile laboratory or
(d) equipment from a mobile or site laboratory

Standard Specification or Calibration Procedure Used:

The standard specification or calibration procedure that is accredited is the issue that is current on the date of the most recent visit, unless otherwise stated.

Glossary of Terms

Facilities:

Public calibration service: Commercial operations which actively seek work from others.

Conditionally available for public calibration: Established for another primary purpose but, more commonly than not, is available for outside work.

Normally not available for public calibration: Unavailable for public calibration more often than not.

Laboratory users wishing to obtain assurance that calibration results are reliable and carried out to the Irish National Accreditation Board criteria should insist on receiving an accredited calibration certificate.

Users should contact the laboratory directly to ensure that this schedule of accreditation is current. INAB will on request verify the status and scope.

Scope of Accreditation

Radiological Protection Institute of Ireland

Permanent Laboratory:

Category A

Calibration Laboratory

(Nominal temperature for calibration work: 23±5°C)

INAB Classification number (P9) Measured quantity	Range of measurement (See Note 1)	Calibration & Measurement Capability expressed as an uncertainty * (See Note 2)	Method and remarks
470 Ionising Radiation Air Kerma Rate Gamma Radiation (Note 3)	^{241}Am 60keV 16 µGyh^{-1} - 625 µGyh^{-1} ^{137}Cs 662keV 6 µGyh^{-1} - 169 mGyh^{-1}	4% 4%	
470 Ionising Radiation Ambient Dose Equivalent Rate Gamma radiation (Note 3)	^{241}Am 60keV 28 µSvh^{-1} - 1087 µSvh^{-1} ^{137} Cs 662keV 7 µSvh^{-1} - 203 mSvh^{-1}	4% 4%	
470 Ionising Radiation Surface contamination Monitor Response. Alpha and Beta Particle radiation (Note 4)	Alpha- and Beta-emitting radionuclides: ^{137} Cs, ^{14} C, ^{90} Sr, ^{36} Cl, ^{241} Am	5 to 20% depending on monitor type	In house procedure TP213 which is based on NPL Measurement Good Practice Guide No. 14 Calibrations based on use of large area ISO 8769 type sources.

* Notes:

1. The air kerma rates are determined using a secondary standard ionisation chamber.
2. The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%. The range of uncertainties obtained when calibrating instruments for clients is typically 5-20%.
3. Calibration of health physics instruments such as a dose/doserate survey meters, personal dosimeters and bleepers, and ion chambers/electrometer systems, using calibrated gamma radiation fields from caesium-137 and americium-241 sources. Calibration of Panasonic whole body TLDs using a calibrated gamma radiation field from a caesium-137 source only.
4. Specific calibrations using ISO 8769 sources are used to confirm conformance to type and to confirm fitness-for-use.