



Australian Government

Department of Industry, Science,
Energy and Resources

**National
Measurement
Institute**

**Appointment as a Verifying Authority
for
Reference Standards of Measurement**

In accordance with Regulation 73 of *National Measurement Regulations 1999* (Cth), in force under the *National Measurement Act 1960* (Cth), the Chief Metrologist hereby appoints,

**Australian Radiation Protection and Nuclear Safety Agency (ARPANSA)
(ABN 61 321 195 155)
619 Lower Plenty Road
Yallambie VIC 3085**

to be a Verifying Authority for the verification of reference standards of measurement under regulation 13 of the *National Measurement Regulations 1999* (Cth) for the following physical quantities:

Absorbed dose rate, Air kerma rate

This appointment is for the period from 29 March 2022 to 28 March 2025 and is limited to the range specified in the attached schedule, and the use of procedures approved by the Chief Metrologist.

Dated this Twenty Ninth day of March 2022

Signed

James Cantrill
For Dr Richard Bruce Warrington
Chief Metrologist
National Measurement Institute

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Schedule to Appointment as a Verifying Authority for Reference Standards of Measurement

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(ABN 61 321 195 155)
619 Lower Plenty Road
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Physical Quantity	Range of Standard	Least Uncertainty
Absorbed dose rate (to water) For ionising radiation dosimeters		
<ul style="list-style-type: none">1.2 MeV γ-rays from Co-60 source	1 to 20 mGy/s	0.8%
Air kerma rate For the output of a radioactive source		
<ul style="list-style-type: none">662 keV γ-rays from Cs-137 source	6×10^{-9} to 2×10^{-3} Gy/h	2.0%
<ul style="list-style-type: none">1250 keV γ-rays from Co-60 source	6×10^{-5} to 2×10^{-4} Gy/h	3.0%
Air kerma rate For ionising radiation dosimeters		
<ul style="list-style-type: none">1.2 MeV γ-rays from Co-60 source	0.1 to 20 mGy/s	1.0%
<ul style="list-style-type: none">662 keV γ-rays from Cs-137 source	0.1 to 20 mGy/s	1.4%
<ul style="list-style-type: none">X-rays for accelerating potentials of 20 to 300 kVp and half-value layers of 0.1 to 20 mm of aluminium using a tungsten-target continuous x-ray tube	0.1 to 10 mGy/s	1.3%

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For Dr Richard Bruce Warrington
Chief Metrologist
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Signatories

The following persons are the permitted signatories under this appointment:

Name	Physical Quantity	Range
Dr Duncan Butler	Absorbed dose rate, Air kerma rate	as per the scope of this schedule
Dr Chris Oliver	Absorbed dose rate, Air kerma rate	as per the scope of this schedule

Statutory Conditions

This appointment as a verifying authority for reference standards of measurement under regulation 73 of the *National Measurement Regulations 1999* (Cth) is subject to the conditions stated in regulation 77 of the *National Measurement Regulations 1999* (Cth) as amended. At the time of appointment regulation 77 contains the following conditions

- (a) That the authority participate in training, related to the performance of the duties of an authority, required by the Chief Metrologist;
- (b) That the authority report, as required by the Chief Metrologist, about its performance of its duties;
- (c) That the authority, and any responsible agent or employee of the authority, comply with the *National Measurement Act 1960* (Cth) and the *National Measurement Regulations 1999* (Cth) and any condition stated in the instrument of appointment.
- (d) That the authority comply with any determinations applying to the authority under regulation 20 of the *National Measurement Regulations 1999* (Cth).

Additional Conditions

In addition to the statutory conditions of appointment of authorities contained in regulation 77 of the *National Measurement Regulations 1999* (Cth) this appointment is also subject to the following conditions:

- (i) Continuing accreditation against AS ISO/IEC 17025 *General requirements for the competence of testing and calibration laboratories* in the form of NATA accreditation No. 14442

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- (ii) The authority shall not engage a responsible agent or arrange for any standard of measurement to be verified by an agent or anyone under its supervision without obtaining the prior consent of the Chief Metrologist in writing;
- (iii) Discharge of all financial obligations to the Chief Metrologist and/or the National Measurement Institute in respect of this appointment;
- (iv) Compliance with the formatting and/or any other requirements of the Chief Metrologist and/or the National Measurement Institute with respect to certificates of verification of reference standards of measurement;
- (v) During the term of this appointment each signatory under this appointment must attend a legal metrology seminar conducted by the Policy and Regulatory Services Section of the Legal Metrology Branch of the National Measurement Institute;
- (vi) This appointment revokes and replaces any previous appointments and/or any extensions granted to any previous appointments.

Notes: Nil

James Cantrill
For Dr Richard Bruce Warrington
Chief Metrologist
National Measurement Institute

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