

# Schedule of Accreditation



Organisation Name	EPA
Trading As	Environmental Protection Agency
INAB Reg No	311C
Contact Name	Éidín Christie
Address	PO Box 2000, Johnstown Castle Estate, Wexford, H18 YT02
Contact Phone No	01-2697766
Email	e.christie@epa.ie
Website	
Accreditation Standard	EN ISO/IEC 17025 C
Standard Version	2017
Date of award of accreditation	16/04/2013
Scope Classification	Metrology
Services available to the public <sup>1</sup>	Yes

<sup>1</sup> Refer to document on interpreting INAB Scopes of Accreditation

Sites from which accredited services are delivered		
(the detail of the accredited services delivered at each site are on the Scope of Accreditation)		
	Name	Address
1	Dublin - Clonskeagh Square	3 Clonskeagh Square, Clonskeagh Road, Dublin, Ireland, D14 H424
2	Dublin - McCumiskey House	McCumiskey House, Richview, Clonskeagh Road, Dublin 14, Dublin, D14 YR62
3	Kilkenny	Seville Lodge, Callan Road, Kilkenny, R95 ED28

# Scope of Accreditation

Dublin - Clonskeagh Square

Metrology

Category: A

Metrology field - Calibrated Device Type	Measured quantity	Calibration range	Expanded Measurement Uncertainty	Std. ref/SOP	Products	Remarks
117 Radiation - .01 Ionising radiation survey instruments	Air Kerma Rate Gamma Radiation	<sup>137</sup> Cs @ 662keV: 4 $\mu\text{Gyh}^{-1}$ to 183 $\text{mGyh}^{-1}$	0.04	In house Calibration procedure RIC204 and RIC205	Calibration	Air kerma rates are determined using a secondary standard ionisation chamber. The range of uncertainties obtained when calibrating instruments for clients is typically 5-20%.
		<sup>241</sup> Am @ 60keV: 3 $\mu\text{Gyh}^{-1}$ to 194 $\mu\text{Gyh}^{-1}$	0.05	In house Calibration procedure RIC204 and RIC205	Calibration	Air kerma rates are determined using a secondary standard ionisation chamber. The range of uncertainties obtained when calibrating instruments for clients is typically 5-20%.

Ambient Dose Equivalent Rate Gamma Radiation	<sup>137</sup> Cs @ 662keV: 5 $\mu\text{Sv h}^{-1}$ to 220 mSv	0.04	In house Calibration procedure RIC204, RIC206, RIC207 and RIC208	Calibration	Air kerma rates are determined using a secondary standard ionisation chamber. The range of uncertainties obtained when calibrating instruments for clients is typically 5-20%.
	<sup>241</sup> Am @ 60keV: 6 $\mu\text{Sv h}^{-1}$ to 358 $\mu\text{Sv h}^{-1}$	0.05	In house Calibration procedure RIC204, RIC206, RIC207 and RIC208	Calibration	Air kerma rates are determined using a secondary standard ionisation chamber. The range of uncertainties obtained when calibrating instruments for clients is typically 5-20%.
Surface Contamination Monitor Response. Alpha & Beta Particle Radiation	Alpha- & Beta-emitting radionuclides: <sup>14</sup> C	5 to 20% (depending on monitor type)	In house procedure RIC213 based on NPL Measurement Good Practice Guide No.14 with large area ISO 8769 type sources.	Calibration	Calibration of health physics instruments such as dose / doserate survey meters, personal dosimeters and beepers, and ion chambers/electrometer systems, using calibrated gamma radiation fields from caesium-137 and americium-241 sources.
	Alpha- & Beta-emitting radionuclides: <sup>241</sup> Am	5 to 20% (depending on monitor type)	In house procedure RIC213 based on NPL Measurement Good Practice Guide No.14 with large area ISO 8769 type sources.	Calibration	Calibration of health physics instruments such as dose / doserate survey meters, personal dosimeters and beepers, and ion chambers/electrometer systems, using calibrated gamma radiation fields from

					caesium-137 and americium-241 sources.	
		Alpha- & Beta-emitting radionuclides: <sup>90</sup> Sr	5 to 20% (depending on monitor type)	In house procedure RIC213 based on NPL Measurement Good Practice Guide No.14 with large area ISO 8769 type sources.	Calibration	Calibration of health physics instruments such as 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.
		Alpha- & Beta-emitting radionuclides: <sup>137</sup> Cs	5 to 20% (depending on monitor type)	In house procedure RIC213 based on NPL Measurement Good Practice Guide No.14 with large area ISO 8769 type sources.	Calibration	Calibration of health physics instruments such as 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.
		Alpha- & Beta-emitting radionuclides: <sup>36</sup> CL	5 to 20% (depending on monitor type)	In house procedure RIC213 based on NPL Measurement Good Practice Guide No.14 with large area ISO 8769 type sources.	Calibration	Calibration of health physics instruments such as 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.
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*Calibration Measurement Capability (CMC) is expressed in terms of the following parameters:*

- Measure and or reference material*
- Calibration or measurement method or procedure and type of instrument or material calibrated/measured*
- Measurement range and additional parameters where applicable*
- Measurement uncertainty.*

*Measurement uncertainty shall be reported in compliance with EA 4/02 "Expression of the Uncertainty of Measurement in Calibration".*  
*In accordance with INAB policy, uncertainties are calculated for an estimated confidence level of not less than 95%.*

## Metrology

Category: A

Metrology field - Calibrated Device Type	Measured quantity	Calibration range	Expanded Measurement Uncertainty	Std. ref/SOP	Products	Remarks
122 Emissions - .01 Gas analysers	Carbon Monoxide (CO)	0 to 25 $\mu\text{mol/mol}$	$\pm 5\%^*$	EN14626:2012 /SOP AC01	Analyser, Gas Filter Correlation	*Uncertainties are calculated for an estimated confidence level of not less than 95%.
	NO <sub>x</sub> , NO <sub>2</sub>	0 to 500 nmol/mol	$\pm 5\%^*$	EN14211:2012 /SOP AC02	Analyser, by Chemiluminescence	*Uncertainties are calculated for an estimated confidence level of not less than 95%.
	Ozone, O <sub>3</sub>	0 to 250 nmol/mol	$\pm 5\%^*$	EN14625:2012 /SOP AC04	Analyser, UV Absorption	*Uncertainties are calculated for an estimated confidence level of not less than 95%.
	SO <sub>2</sub>	0 to 500 nmol/mol	$\pm 5\%^*$	EN14212:2012 /SOP AC03	Analyser, UV Fluorescence	*Uncertainties are calculated for an estimated confidence level of not less than 95%.

Calibration Measurement Capability (CMC) is expressed in terms of the following parameters:

- Measure and or reference material
- Calibration or measurement method or procedure and type of instrument or material calibrated/measured
- Measurement range and additional parameters where applicable
- Measurement uncertainty.

Measurement uncertainty shall be reported in compliance with EA 4/02 "Expression of the Uncertainty of Measurement in Calibration".

In accordance with INAB policy, uncertainties are calculated for an estimated confidence level of not less than 95%.

Category: A

Metrology field - Calibrated Device Type	Measured quantity	Calibration range	Expanded Measurement Uncertainty	Std. ref/SOP	Products	Remarks
122 Emissions - .01 Gas analysers	Benzene	0 to 15.4 nmol/mol	±25%*	EN14662-3:2005 /SOP AC05	Analyser, Autoamted pump sampling	*Uncertainties are calculated for an estimated confidence level of not less than 95%.
<p><i>Calibration Measurement Capability (CMC) is expressed in terms of the following parameters:</i></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> <i>Measure and or reference material</i></li> <li><input type="checkbox"/> <i>Calibration or measurement method or procedure and type of instrument or material calibrated/measured</i></li> <li><input type="checkbox"/> <i>Measurement range and additional parameters where applicable</i></li> <li><input type="checkbox"/> <i>Measurement uncertainty.</i></li> </ul> <p><i>Measurement uncertainty shall be reported in compliance with EA 4/02 "Expression of the Uncertainty of Measurement in Calibration".</i></p> <p><i>In accordance with INAB policy, uncertainties are calculated for an estimated confidence level of not less than 95%.</i></p>						