



Your Partner in Diagnostic Imaging
MRI | CT | DEXA | US | PETCT | XRAY

The Great Badge Breakup: How We Ended Our Relationship with Dose Monitors

Orlagh Hannaway

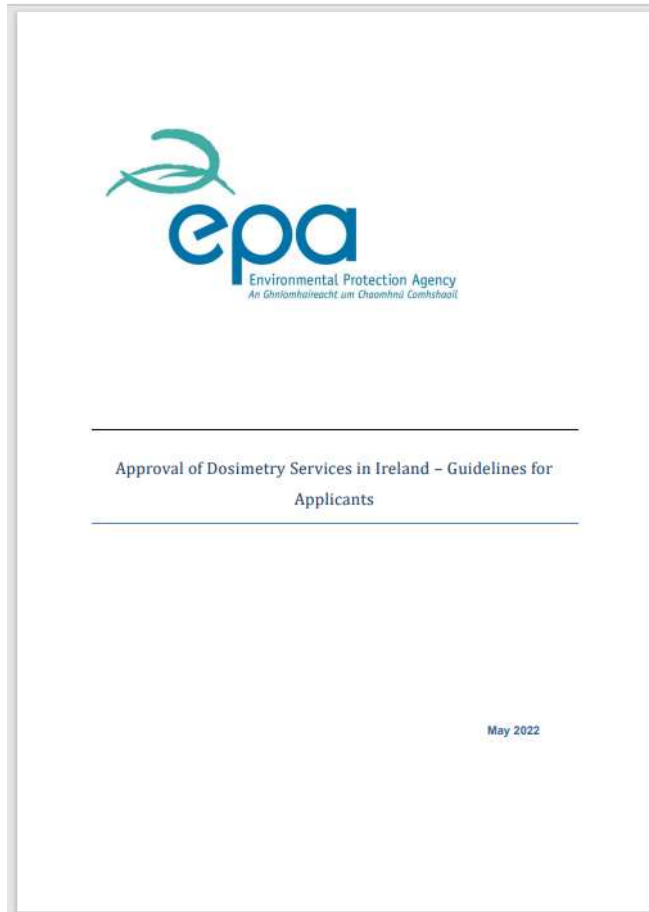
Lead RPO & CT CSR Cherrywood



Dose Monitors

- Legislation SI30
- Regulation 39 - Categorisation of exposed workers
- Category A: an exposed worker liable to receive an effective dose greater than 6mSv in a year or an equivalent dose greater than 15mSv per year to the lense of the eye, or greater than 150mSv per year to the skin/extremities.
- Category B: an exposed worker liable to receive an effective dose more than 1mSv but less than 6mSv, 15mSv for the lense and more than 50mSv but less than 150mSv for skin/extremities.
- Members of the Public: the limit on the effective dose for publis exposure is 1mSv in a year. The limit on the equivalent dose for the lens of the eye is 15mSv in a year and the limit on the equivalent dose for the skin/extremities is 50mSv in a year

EPA Guidance & List of Approved Dosimetry Services



Dosimetry Service	Address	Contact Details
Dosilab AG	Gartenstadtstrasse 7a CH-3095 Kenz Switzerland	Telephone: 00 41 31 744 0200 Fax: 00 41 31 744 9290 Email: info@dosilab.ch Website: http://www.dosilab.ch/
UK Health Security Agency (Formerly Public Health England)	Chilton Didcot Oxon OX11 0RQ UK	Telephone: 00 44 1235 535240 Fax: 00 44 1235 029564 Email: nicky.gibbens@ukhsa.gov.uk Website: www.gov.uk/ukhsa
Landauer	28 Bankside - Station Approach Kidlington Oxford OX5 1JE UK	Telephone: 00 44 1865 373008 Fax: 00 44 1865 373017 Email: admin@landauer.co.uk Website: www.landauer.co.uk/
Mirion Technologies	2652 McCaw Avenue Irvine California 92614 USA	Telephone: 001 800 251 3331 (free phone) 001 949 419 1000 Website: www.mirion.com Irish distributor: Medray Imaging System Unit B6, Clonlara Avenue, Baldonnel Business Park, Dublin 22 Telephone: (01) 466 2773 Email: sales@medray.ie
Mirion Technologies (AWST) GmbH	Mirion Technologies (AWST) GmbH Otto-Hahn-Ring 6 81732 München	Telephone: +49 89 2555-22853 Fax: +49 89 2555-23133 Email: awst-service@mirion.com Website: https://awst.mirion.com

The logo graphic consists of several overlapping, semi-transparent rings in shades of teal and green, forming a circular shape on the left side of the slide.

Mirion Technologies

- Supplier login
- Radiation Summary Reports
- High Dose notifications
- Return badges in timely manner
- Penalty for late return



What We Do

- Information leaflet on appropriate usage
- Spot check audit
- Process followed if dose badge returned reading
- High dose investigation form
- Supplier investigation
- RPA/MPE advice
- Investigative steps and time



Within Alliance Medical

- Mixture of categorised workers within AMDI sites based on services
- Safe practice for categorised workers
- New technology, new design and good working practices = staff dose < public dose limit

Cherrywood Site

- 2019
- MRI & X-ray
- Category B worker
- Badged

Occupational Radiation Summary Report

ACCOUNT NO: [REDACTED] LOCATION NO: [REDACTED] (ALLIANCE MEDICAL CHERRYWOOD)

Accredited by the
 "National Institute of Standards and Technology
 through **NVLAP** for the specific scope of
 accreditation under lab code 100555-0"

LOCATION ADDRESS:
 ALLIANCE MEDICAL CHERRYWOOD
 ATTN: [REDACTED]
 LAYA HEALTH & WELLBEING CLINIC
 BUILDING 8 CHERRYWOOD BUSINESS PARK
 DUBLIN 18, IE D18 W319
 IE

REPORTING PERIOD:	01/01/2019 - 31/03/2019	
PAGE:	1	OF: 1
LICENSE NO:		

WEARER IDENTIFICATION					DOSIMETER & EXPOSURE HISTORY																
WEARER NUMBER	NAME OR OTHER DESIGNATION	ID	SEX	BODY REGION	DOSE EQUIVALENT IN MILLISIEVERTS FOR PERIODS INDICATED BELOW																
					MONTH TO DATE				QUARTER TO DATE				YEAR TO DATE				LIFETIME TO DATE				
					HP(10) DEEP	HP(3) EYE	HP(0.07) SHALL	NEUT.	HP(10) DEEP	HP(3) EYE	HP(0.07) SHALL	NEUT.	HP(10) DEEP	HP(3) EYE	HP(0.07) SHALL	NEUT.	NO. DPT'S	PROC. NOTES	HP(10) DEEP	HP(0.07) SHALL	RECEPTION DATE LIFETIME TOTAL
5717	Hannaway, Orlagh		F	WB TR					0.00	0.00	0.00		0.00	0.00	0.00		1	0	0.00	0.00	03/01/2019

Occupational Radiation Summary Report

ACCOUNT NO: [REDACTED] LOCATION NO: [REDACTED] (ALLIANCE MEDICAL CHERRYWOOD)

Accredited by the
 "National Institute of Standards and Technology
 through **NVLAP** for the specific scope of
 accreditation under lab code 100555-0"

LOCATION ADDRESS:
 ALLIANCE MEDICAL CHERRYWOOD
 ATTN: [REDACTED]
 LAYA HEALTH & WELLBEING CLINIC
 BUILDING 8 CHERRYWOOD BUSINESS PARK
 DUBLIN 18, IE D18 W319
 IE

REPORTING PERIOD:	01/04/2019 - 01/07/2019	
PAGE:	1	OF: 1
LICENSE NO:		

WEARER IDENTIFICATION					DOSIMETER & EXPOSURE HISTORY																
WEARER NUMBER	NAME OR OTHER DESIGNATION	ID	SEX	BODY REGION	DOSE EQUIVALENT IN MILLISIEVERTS FOR PERIODS INDICATED BELOW																
					MONTH TO DATE				QUARTER TO DATE				YEAR TO DATE				LIFETIME TO DATE				
					HP(10) DEEP	HP(3) EYE	HP(0.07) SHALL	NEUT.	HP(10) DEEP	HP(3) EYE	HP(0.07) SHALL	NEUT.	HP(10) DEEP	HP(3) EYE	HP(0.07) SHALL	NEUT.	NO. DPT'S	PROC. NOTES	HP(10) DEEP	HP(0.07) SHALL	RECEPTION DATE LIFETIME TOTAL
5717	Hannaway, Orlagh		F	WB TR					0.00	0.00	0.00		0.00	0.00	0.00		3	0	0.00	0.00	03/01/2019

Occupational Radiation Summary Report

Accredited by the
National Institute of Standards and Technology
through **NVLAP** for the specific scope of
accreditation under lab code 100555-0*

ACCOUNT NO: [REDACTED] LOCATION NO: [REDACTED] (ALLIANCE MEDICAL CHERRYWOOD)

LOCATION ADDRESS:

ALLIANCE MEDICAL CHERRYWOOD
ATTN: [REDACTED]
LAYA HEALTH & WELLBEING CLINIC
BUILDING 8 CHERRYWOOD BUSINESS PARK
DUBLIN 18, IE D18 W319
IE

REPORTING PERIOD:	01/07/2019 - 01/10/2019
PAGE:	1 OF: 1
LICENSE NO:	

WEARER IDENTIFICATION					DOSIMETER & EXPOSURE HISTORY																
WEARER NUMBER	NAME OR OTHER DESIGNATION	ID	X W	BODY REGION	DOSE EQUIVALENT IN MILLISIEVERTS FOR PERIODS INDICATED BELOW																
					MONTH TO DATE				QUARTER TO DATE				YEAR TO DATE				LIFETIME TO DATE				
					HP(10) DEEP	HP(3) EYE	HP(0.07) SHALL	NEUT.	HP(10) DEEP	HP(3) EYE	HP(0.07) SHALL	NEUT.	HP(10) DEEP	HP(3) EYE	HP(0.07) SHALL	NEUT.	NO. RPT'S	PROG. NOTES	HP(10) DEEP	HP(0.07) SHALL	EXPIRATION DATE (LIFETIME TOTAL)
5717	Hannaway, Oragh		F	WB TR					0.00	0.00	0.00		0.00	0.00	0.00		4	0	0.00	0.00	03/01/2019

Occupational Radiation Summary Report

Accredited by the
National Institute of Standards and Technology
through **NVLAP** for the specific scope of
accreditation under lab code 100555-0*

ACCOUNT NO: [REDACTED] LOCATION NO: [REDACTED] (ALLIANCE MEDICAL CHERRYWOOD)

LOCATION ADDRESS:

ALLIANCE MEDICAL CHERRYWOOD
ATTN: [REDACTED]
LAYA HEALTH & WELLBEING CLINIC
BUILDING 8 CHERRYWOOD BUSINESS PARK
DUBLIN 18, IE D18 W319
IE

REPORTING PERIOD:	01/09/2019 - 31/12/2019
PAGE:	1 OF: 1
LICENSE NO:	

WEARER IDENTIFICATION					DOSIMETER & EXPOSURE HISTORY																
WEARER NUMBER	NAME OR OTHER DESIGNATION	ID	X W	BODY REGION	DOSE EQUIVALENT IN MILLISIEVERTS FOR PERIODS INDICATED BELOW																
					MONTH TO DATE				QUARTER TO DATE				YEAR TO DATE				LIFETIME TO DATE				
					HP(10) DEEP	HP(3) EYE	HP(0.07) SHALL	NEUT.	HP(10) DEEP	HP(3) EYE	HP(0.07) SHALL	NEUT.	HP(10) DEEP	HP(3) EYE	HP(0.07) SHALL	NEUT.	NO. RPT'S	PROG. NOTES	HP(10) DEEP	HP(0.07) SHALL	EXPIRATION DATE (LIFETIME TOTAL)
5717	Hannaway, Oragh		F	WB TR					0.00	0.00	0.00		0.00	0.00	0.00		5	0	0.00	0.00	03/01/2019



How The Change Was Made

- 2023
- RPAs completed in depth risk assessments based on the services offered at specific sites
- Acceptance by respective Radiation Safety Committees
- Letter issued to all staff explaining change
- Staff acceptance and positive feedback
- Comfort badging always available



What Now?

- Badged Workers & Environmental Badges
- Dose sharing
- RPA/MPE guidance
- Continue to investigate any high dose readings
- Time



Conclusion

- Our experience based on site specific modalities, dose records and risk assessments
- Saved time and money without compromising staff safety



Thank You

References

- Ireland, European Union (Medical Exposure to Ionising Radiation) Regulations 2018. SI No. 30 of 2019.
- [Approved Dosimetry Services | Environmental Protection Agency](#)
- [Dosimetry Services | Mirion](#)
- Alliance Medical (2025) Radiation Dosimetry Wearer Instructions. Limerick: Alliance Medical. Internal document
- Alliance Medical (2023) Radiation Incident Procedure. Limerick: Alliance Medical. Internal document
- Alliance Medical (2026) Radiation Safety (ROI) Policy. Limerick: Alliance Medical. Internal document

Orlagh.Hannaway@alliancemedical.ie