

# Radioactive Waste Ireland

David Fenton

Environmental Protection Agency

EC meeting on RWM in the Small Inventory Member States

22<sup>nd</sup> October 2024

# Ireland



# Sources Used In Ireland

- Ireland has no
  - Nuclear Power Plants
  - Research Reactors
  - Fuel fabrication/recycling facilities
  - Radioactive waste storage/disposal facilities
- Ireland has
  - Sealed sources (sterilisation, inspection, brachytherapy)
  - Unsealed sources (mainly short lived nuclides)



# Relevant Legislation

## European Requirements

- Basic Safety Standards Directive (2013/59/EURATOM)
- Radioactive Waste Directive (2011/70/EURATOM)
- Radioactive Shipments Directive (2006/117/EURATOM)

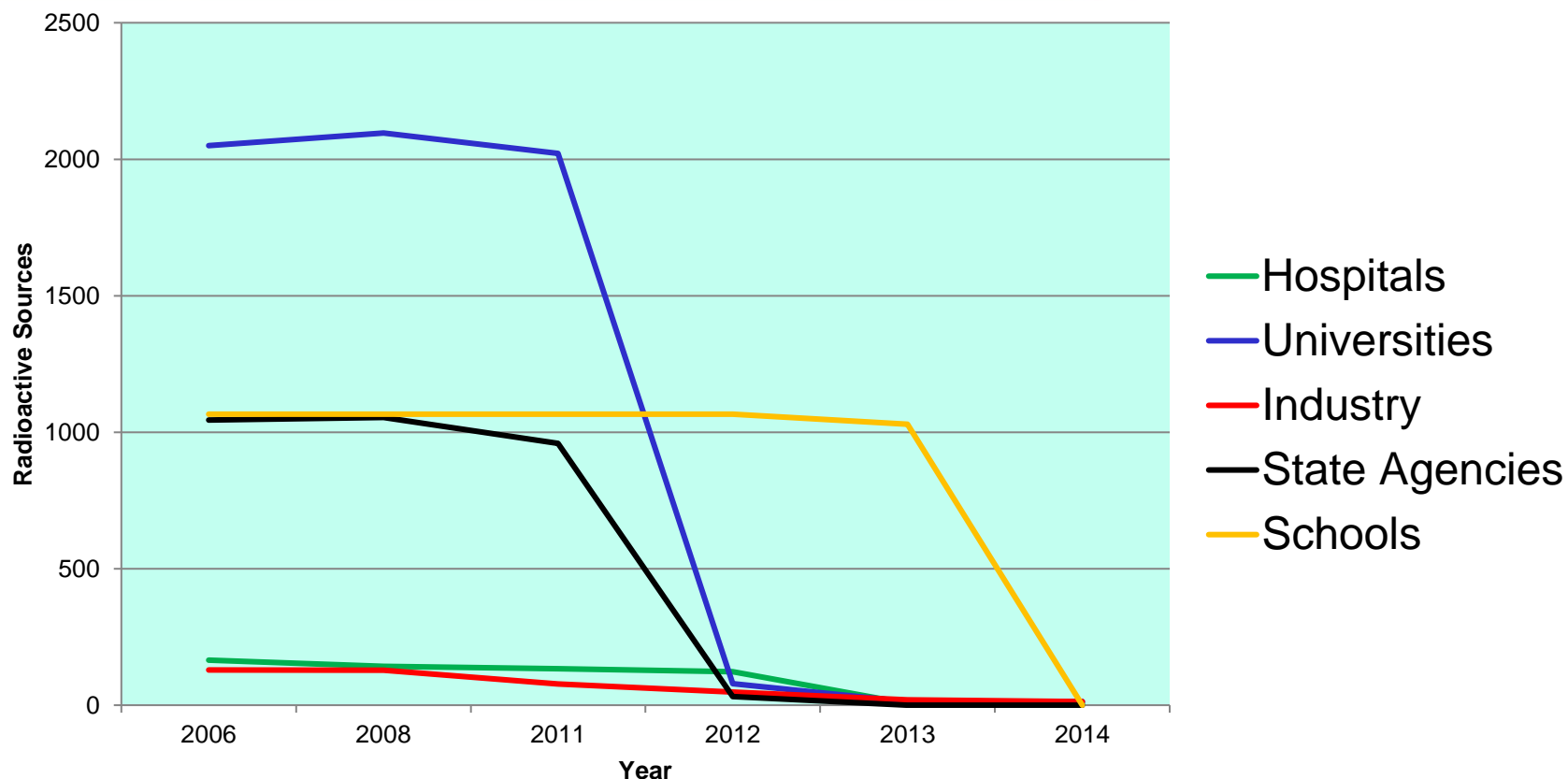
## Implemented through

- Ionising Radiation Regulation 2019 (S.I. 30 of 2019)
- Radiological Protection Act, 1991 as amended (graded authorisation)
- S.I. No. 86 of 2009, European Communities (Supervision and Control of Certain Shipments of Radioactive Waste and Spent Fuel) Order, 2009

# Key Principals for RWM in Ireland

- Polluter pays
- Inventory Reduction Programme
- Enhanced Enforcement
- Operational Protocol for the recovery and management of Orphan Sources
- Financial Provision for Waste Management

# Irish Government funded Source Reduction Programme



The source reduction programme 2011-2014

## Legacy Sources 2011-2013 Source Reduction Programme

- 2011 estimated >3300 disused sources with  $T_{1/2} > 10$  yrs, held by 63 licensees at various locations across Ireland. Now at 14.
- Many of these sources were acquired before the introduction of take back legal requirement.
- Users of sources are now legally required to have a take back agreement



# Ireland's National Inventory, (From Joint Convention Report 2024)



Sector	No. of licensees	No. of sources
Medical	0	0
Industry	0	0
Education	2	4
State/Other	1	5
<b>Total</b>	<b>3</b>	

All above sources are IAEA Category 5 sources.  
aware of three lightning preventors currently in si  
orphan sources.





# Ireland reporting on Implementation of the Waste Directive

- August 2024 Deadline missed, regrettably
- Report to be submitted by 15 November 2024

# The needs and challenges in managing radioactive waste in Ireland

- Mechanism in place through take back management of RW into the future.
- Portal monitors at municipal incinerators have identified two orphan sources. (Ra-226 sources).
- Most detections are short lived medical radioisotopes.
- While the number of orphan sources decreasing, there is a need for a management policy & a framework for any orphan sources arising



# Development, skills/competencies to support RWM in Ireland

- EPA's radiation safety inspection activities are accredited to ISO 17020:2012
- Maintaining staff competence in radiological protection is included in the EPA's Corporate Risk Register
- Staff skillset on radiological protection is routinely assessed through the Performance Management and Development System (PMDS)
- EPA offers a range of support to staff to assist them to perform and develop their skillsets
- Informal learning is encouraged through active participation in workshops, conferences and seminars.

## Development, skills/competencies to support RWM in Ireland

- Notwithstanding this, the EPA will continue to develop expertise on Rad Waste through education, training and research
- In that context we very much welcome our invitation to participate in this meeting and this initiative.