



Country Waste Profile Report for IRELAND Reporting Year: 2005

*For guidance on reading Country Waste Profile Reports,
please refer to the following internet based document:*

<http://www-newmdb.iaea.org/help/profiles9/guide.pdf>

*For further information, please contact the Responsible Officer via e-mail:
NEWMDB@IAEA.org*

Waste Classification Schemes

Country: IRELAND

Reporting Year: 2005

Waste Class Matrix: **IAEA Def.**

This country does use the IAEA Scheme: Yes

Description: The Agency's standard matrix

Waste Class Name	Distribution %		
	LILW-SL	LILW-LL	HLW
LILW-SL	100.0	0.0	0.0
LILW-LL	0.0	100.0	0.0
HLW	0.0	0.0	100.0

Comment **# 143: Disused source inventory**

Ireland has no nuclear power reactors or research reactors and no uranium mining or fuel fabrication facilities. The generation of radioactive waste is therefore on a very small scale when compared with countries which have or had such facilities, being limited to radioactive waste arising from the use of radioactive materials in medicine, industry and research/teaching. Sealed Radioactive sources are licensed by the regulator, the Radiological Protection Institute of Ireland, on the understanding that they will be returned to the supplier when no longer required. Unsealed radioactive waste must be held in storage until the radioactive content decays to below values where disposal is permitted. Normally radioactive waste is stored on the premises where the practice, which generated it, is located. There is no central radioactive waste repository in Ireland.

Storage of all radioactive waste is subject to strict control by licence and inspection by the RPII.

The sealed radioactive sources listed in the inventories below arise from sources which were imported prior to the introduction of the take-back licencing requirement, and sources where, for what ever reason, the take-back agreement has not been honoured

Definition of «unprocessed waste» and «processed waste»:

Is not defined

Site (Structure) : Education

Country: IRELAND

Reporting Year: 2005

Full Name:

Location: The term Education refers to 13 sites located throughout the country, such as universities who are involved with education and research and who are licenced to hold disused radioactive materials.

Description:

Official Website:

License Holder(s): Third Level Institutes of Education

Waste management facilities that are located at this site:

Facility:	Education					
Description:	Third level educational institutes storing sealed sources					
Storage part of facility Education						
The following shows storage status for waste classes and SRS.						
Waste Class	Actual	Planned				
LILW-SL	No	No				
LILW-LL	No	No				
HLW	No	No				
List SRS?	Yes					
List UMMT?	No					
Capacity:						
Types of Storage Units						
Storage Unit Name	Type Name	Year Opened	Closed?	Full?	Modular?	Contains SRS?
SRS	various	0	No	No	No	Yes

Site (Data) : Education

Stock of waste as at December 2005

Country: IRELAND

Reporting Year: 2005

Site Name: Education

Full Name:

Inventory Reporting Date: December 2005

Waste Matrix Used: IAEA Def.

Spent Sources <=30 years in Storage

Nuclide	Number of Sources/Total Activity of Sources (GBq)			c o n d	u n c o n d	c a t	Total Activity for all Groups (GBq)	Decay Date
	Group I less than or equal 4GBq	Group II more than 4GBq but less than or equal 4E+4GBq	Group III more than 4E+4GBq					
	num/activity	num/activity	num/activity					
Cd-109	1			Y	N	Y	1.100E-001	
	1.100E-001							
Co-57	9			Y	N	Y	4.500E+000	
	4.500E+000							
Co-60	24			Y	N	Y	2.150E-001	
	2.150E-001							
Co-60		1		Y	N	Y	1.110E+001	
		1.110E+001						
Cs-137	11			Y	N	Y	9.150E-002	
	9.150E-002							
Cs-137		1		Y	N	Y	1.369E+001	
		1.369E+001						
Fe-55	1			Y	N	Y	3.700E-001	
	3.700E-001							
H-3		2		Y	N	Y	3.700E+001	
		3.700E+001						
Sr-90	1	2		Y	N	Y	1.524E+002	
	7.400E-001	1.517E+002						
Sr-90	30			Y	N	Y	3.240E-003	
	3.240E-003							

Site (Data) : Education

Stock of waste as at December 2005

Country: IRELAND

Reporting Year: 2005

Spent Sources > 30 years in Storage

Nuclide	Number of Sources/Total Activity of Sources (GBq)		c o n d	u n c o n d	c a t	Total Activity for all Groups (GBq)	Decay Date
	Group I less than or equal 2 GBq	Group II more than 2GBq					
	num/activity	num/activity					
Am-241	17		Y	N	Y	6.000E-003	
	6.000E-003						
Ni-63	1		Y	N	Y	3.700E-001	
	3.700E-001						
Ra-226	12		Y	N	Y	4.000E-002	
	4.000E-002						
Sm-151	1	2	Y	N	Y	7.770E+000	
	3.700E-001	7.400E+000					
Th-232	3		Y	N	Y	1.000E-004	
	1.000E-004						

Site (Structure) : Industry

Country: IRELAND

Reporting Year: 2005

Full Name:

Location: The term refers to the several industrial licensees who hold disused sources.

Description:

Official Website:

License Holder(s): Various industrial companies

Waste management facilities that are located at this site:

Facility:	Industry																	
Description:	This term refers to the disused sources held by industrial licensees in Ireland																	
<p>Storage part of facility Industry</p> <p>The following shows storage status for waste classes and SRS.</p> <table border="1"> <thead> <tr> <th>Waste Class</th> <th>Actual</th> <th>Planned</th> </tr> </thead> <tbody> <tr> <td>LILW-SL</td> <td>No</td> <td>No</td> </tr> <tr> <td>LILW-LL</td> <td>No</td> <td>No</td> </tr> <tr> <td>HLW</td> <td>No</td> <td>No</td> </tr> </tbody> </table>							Waste Class	Actual	Planned	LILW-SL	No	No	LILW-LL	No	No	HLW	No	No
Waste Class	Actual	Planned																
LILW-SL	No	No																
LILW-LL	No	No																
HLW	No	No																
List SRS?	Yes																	
List UMMT?	No																	
Capacity:																		
Types of Storage Units																		
Storage Unit Name	Type Name	Year Opened	Closed?	Full?	Modular?	Contains SRS?												
SRS	various	0	No	No	No	Yes												

Site (Data) : Industry

Stock of waste as at December 2005

Country: IRELAND

Reporting Year: 2005

Site Name: Industry

Full Name:

Inventory Reporting Date: December 2005

Waste Matrix Used: IAEA Def.

Spent Sources <=30 years in Storage

Nuclide	Number of Sources/Total Activity of Sources (GBq)			c o n d	u n c o n d	c a t	Total Activity for all Groups (GBq)	Decay Date
	Group I less than or equal 4GBq	Group II more than 4GBq but less than or equal 4E+4GBq	Group III more than 4E+4GBq					
	num/activity	num/activity	num/activity					
Cf-252	1			Y	N	Y	4.000E-005	
	4.000E-005							
Cm-244	1			Y	N	Y	3.700E+000	
	3.700E+000							
Co-60	1			Y	N	Y	3.700E+000	
	3.700E+000							
Co-60	1			Y	N	Y	3.700E-001	
	3.700E-001							
Cs-137	28	3		Y	N	Y	6.625E+001	
	3.110E+001	3.515E+001						
Cs-137	16			Y	N	Y	3.600E-002	
	3.600E-002							
Cs-137		1		Y	N	Y	1.110E+002	
		1.110E+002						
H-3		300		Y	N	Y	2.770E+005	
		2.770E+005						
Hg-203	1			Y	N	Y	1.500E-003	
	1.500E-003							
Ir-192	1			Y	N	Y	1.000E-001	
	1.000E-001							
Kr-85		6		Y	N	Y	5.580E+001	
		5.580E+001						

Site (Data) : Industry

Stock of waste as at December 2005

Country: IRELAND

Reporting Year: 2005

Na-22	1			Y	N	Y	3.700E-004	
	3.700E-004							
Pm-147	7			Y	N	Y	1.000E-001	
	1.000E-001							
Po-210	2			Y	N	Y	2.000E-002	
	2.000E-002							
Sr-90	3			Y	N	Y	3.740E-001	
	3.740E-001							
Sr-90	21			Y	N	Y	1.310E+001	
	1.310E+001							
TI-204	8			Y	N	Y	4.940E-001	
	4.940E-001							

Site (Data) : Industry

Stock of waste as at December 2005

Country: IRELAND

Reporting Year: 2005

Spent Sources > 30 years in Storage

Nuclide	Number of Sources/Total Activity of Sources (GBq)		c o n d	u n c o n d	c a t	Total Activity for all Groups (GBq)	Decay Date
	Group I less than or equal 2 GBq	Group II more than 2GBq					
	num/activity	num/activity					
Am-241		1	Y	N	Y	1.850E+001	
		1.850E+001					
Am-241	6		Y	N	Y	1.200E-002	
	1.200E-002						
Am-241	42	4	Y	N	Y	5.965E+001	
	4.300E+001	1.665E+001					
Ni-63	28		Y	N	Y	1.040E+001	
	1.040E+001						
Pu-238	2		Y	N	Y	1.480E+000	
	1.480E+000						
Ra-226	2		Y	N	Y	5.400E-002	
	5.400E-002						

Comment **# 7192: Neutron generators**

Data for Am-241 sources includes 8 Am-241/Be (cat 4) sources of total activity 12.36 GBq plus one source (cat 3) of 18.5 GBq

Site (Structure) : Medical

Country: IRELAND

Reporting Year: 2005

Full Name:

Location: The term Medical refers to 12 licensed hospitals located throughout the country who hold disused radioactive sources.

Description:

Official Website:

License Holder(s): Hospitals

Waste management facilities that are located at this site:

Facility:	Medical
Description:	12 Hospitals storing sources

Storage part of facility Medical

The following shows storage status for waste classes and SRS.

Waste Class	Actual	Planned
LILW-SL	No	No
LILW-LL	No	No
HLW	No	No

List SRS?	Yes
List UMMT?	No

Capacity:	
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Types of Storage Units

Storage Unit Name	Type Name	Year Opened	Closed?	Full?	Modular?	Contains SRS?
SRS	various	0	No	No	No	Yes

Site (Data) : Medical

Stock of waste as at December 2005

Country: IRELAND

Reporting Year: 2005

Site Name: Medical

Full Name:

Inventory Reporting Date: December 2005

Waste Matrix Used: IAEA Def.

Spent Sources <=30 years in Storage

Nuclide	Number of Sources/Total Activity of Sources (GBq)			c o n d	u n c o n d	c a t	Total Activity for all Groups (GBq)	Decay Date
	Group I less than or equal 4GBq	Group II more than 4GBq but less than or equal 4E+4GBq	Group III more than 4E+4GBq					
	num/activity	num/activity	num/activity					
Co-57	55			Y	N	Y	7.240E+000	
	7.240E+000							
Cs-137	17			Y	N	Y	1.000E-001	
	1.000E-001							
Gd-153		4		Y	N	Y	1.406E+002	
		1.406E+002						
Ge-68	4			Y	N	Y	1.600E+000	
	1.600E+000							

Spent Sources > 30 years in Storage

Nuclide	Number of Sources/Total Activity of Sources (GBq)		c o n d	u n c o n d	c a t	Total Activity for all Groups (GBq)	Decay Date
	Group I less than or equal 2 GBq	Group II more than 2GBq					
	num/activity	num/activity					
Am-241	3		Y	N	Y	4.440E-001	
	4.440E-001						
Ni-63	1		Y	N	Y	5.550E-001	
	5.550E-001						
Pu-238		1	Y	N	Y	9.250E+001	
		9.250E+001					
Ra-226	8		Y	N	Y	4.900E-002	
	4.900E-002						

Site (Structure) : State Labs

Country: IRELAND

Reporting Year: 2005

Full Name:

Location: The term refers to 11 licensees, such as State run laboratories, located throughout the country and who hold disused radioactive sources.

Description:

Official Website:

License Holder(s): State Labs and agencies

Waste management facilities that are located at this site:

Facility:	State Labs					
Description:	State laboratories and agencies that are storing a disused source(s)					
Storage part of facility State Labs						
The following shows storage status for waste classes and SRS.						
Waste Class	Actual	Planned				
LILW-SL	No	No				
LILW-LL	No	No				
HLW	No	No				
List SRS?	Yes					
List UMMT?	No					
Capacity:						
Types of Storage Units						
Storage Unit Name	Type Name	Year Opened	Closed?	Full?	Modular?	Contains SRS?
SRS	various	0	No	No	No	Yes

Site (Data) : State Labs

Stock of waste as at December 2005

Country: IRELAND

Reporting Year: 2005

Site Name: State Labs

Full Name:

Inventory Reporting Date: December 2005

Waste Matrix Used: IAEA Def.

Spent Sources <=30 years in Storage

Nuclide	Number of Sources/Total Activity of Sources (GBq)			c o n d	u n c o n d	c a t	Total Activity for all Groups (GBq)	Decay Date
	Group I less than or equal 4GBq	Group II more than 4GBq but less than or equal 4E+4GBq	Group III more than 4E+4GBq					
	num/activity	num/activity	num/activity					
Ba-133	1			Y	N	Y	3.300E-001	
	3.300E-001							
Cd-109	1			Y	N	Y	1.850E-001	
	1.850E-001							
Co-60	130			Y	Y	Y	2.388E+001	
	2.388E+001							
Cs-137	9			Y	N	Y	1.075E+001	
	1.075E+001							
Cs-137	5			Y	N	Y	1.060E-002	
	1.060E-002							
Fe-55	1			Y	N	Y	1.665E+000	
	1.665E+000							
H-3		1		Y	N	Y	6.475E+000	
		6.475E+000						
Sr-90	2	1		Y	N	Y	7.585E+000	
	1.850E-001	7.400E+000						
Tl-204	1			Y	N	Y	7.000E-003	
	7.000E-003							

Site (Data) : State Labs

Stock of waste as at December 2005

Country: IRELAND

Reporting Year: 2005

Spent Sources > 30 years in Storage

Nuclide	Number of Sources/Total Activity of Sources (GBq)		c o n d	u n c o n d	c a t	Total Activity for all Groups (GBq)	Decay Date
	Group I less than or equal 2 GBq	Group II more than 2GBq					
	num/activity	num/activity					
Am-241	7	2	Y	N	Y	3.034E+001	
	8.140E+000	2.220E+001					
C-14	75		Y	N	Y	1.390E-001	
	1.390E-001						
Cl-36	1		Y	N	Y	6.000E-005	
	6.000E-005						
Ni-63	7		Y	N	Y	2.970E+000	
	2.970E+000						
Ra-226	890		Y	Y	Y	6.700E-002	
	6.700E-002						
U-238	3		Y	N	Y	5.550E-001	
	5.550E-001						

Comment **# 7191: Neutron generators**

Am-241 sources of < 4GBq, include 5 Am-241/Be sources of total activity 8.14GBq

Regulations / Laws

Country: IRELAND

Reporting Year: 2005

Name:	SI 125		
Title or Name:	Radiological Protection Act, 1991(Ionising Radiation) Order, 2000(SI125 of 2000) giving effect to EU Council Directive 96/29/Euratom 1996		
Reference Number:	SI125 of 2000		
Date Promulgated or Proclaimed:	5/13/2000		Law

Future Outlook

Country: IRELAND

Reporting Year: 2005

Data not available.

Future Outlook

Country: IRELAND

Reporting Year: 2005

Data not available.

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Data not available.

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