



Country Waste Profile Report for IRAN, ISLAMIC REPUBLIC OF Reporting Year: 2004

*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: IRAN, ISLAMIC REPUBLIC OF

Reporting Year: 2004

Waste Class Matrix: **IAEA Def.**

This country does use the IAEA Scheme: No

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

Waste Class Matrix: **Iran**

Description: Waste classification scheme for Iran is not designated in a law or regulation but it is in the approval stage.

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

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

Is not defined

Groups Overview

Country: IRAN, ISLAMIC REPUBLIC OF

Reporting Year: 2004

Reporting Group:	WMD
Inventory Reporting Date:	December 2004
Waste Matrix Used:	Iran
Description:	Waste Management Department

Site Name	Facility Name	Facilities Defined		
ASB	ASB		storage	
CWMB	CWMB	processing		
KRC	KSB		storage	
LA	LA			disposal

Site (Structure) : ASB

Country: IRAN, ISLAMIC REPUBLIC OF

Reporting Year: 2004

Full Name: Anarak Storage Building

Location: Anarak

Description:

Official Website:

License Holder(s): Waste Management Dept.

Waste management facilities that are located at this site:

Facility:	ASB					
Description:	Anarak Storage Building for LLW, ILW-SL and SRS					
Storage part of facility		ASB				
The following shows storage status for waste classes and SRS.						
Waste Class	Actual	Planned				
VLLW	No	No				
LLW	No	Yes				
ILW-SL	Yes	Yes				
LILW-LL	No	No				
HLW	No	No				
List SRS?	Yes					
List UMMT?	No					
Capacity:	sufficient capacity for 40 years.					
Types of Storage Units						
Storage Unit Name	Type Name	Year Opened	Closed?	Full?	Modular?	Contains SRS?
ASBStorage	building	1994	No	No	No	Yes

Site (Data) : ASB

Stock of waste as at December 2004

Country: IRAN, ISLAMIC REPUBLIC OF

Reporting Year: 2004

Site Name: ASB

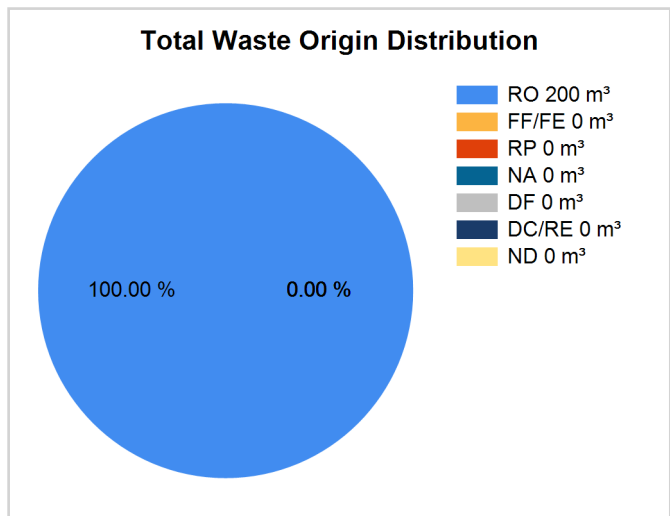
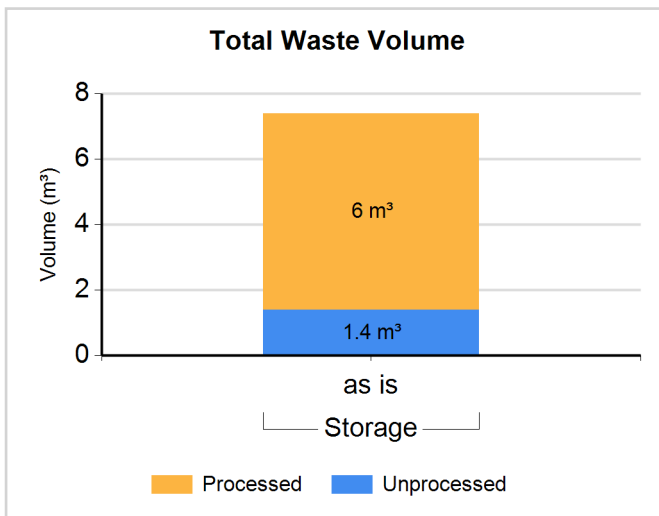
Full Name: Anarak Storage Building

Inventory Reporting Date: December 2004

Waste Matrix Used: Iran

Waste Inventory

Est=distribution is an estimate, Proc.=Is the waste processed (Yes/No)? RO=Reactor Operations, FF/FE=Fuel Fabrication/Fuel Enrichment, RP=Reprocessing, NA=Nuclear Applications,DF=Defence, DC/RE=Decommissioning/Remediation, ND=Not Determined



Note: where volume "as dispo" is provided, volume "as is" is used in the graph instead.

Waste Class: ILW-SL

Waste Class Name	Location / Facility	Proc	Est.	Volume "as is" (m³)	Volume "as dispo" (m³)	RO %	FF/FE %	RP %	NA %	DF %	DC/RE %	ND %
ILW-SL	Storage	N	N	1.400	1.400	100.00	0.00	0.00	0.00	0.00	0.00	0.00
ILW-SL	Storage	Y	N	6.000	6.000	100.00	0.00	0.00	0.00	0.00	0.00	0.00

Site (Data) : ASB

Stock of waste as at December 2004

Country: IRAN, ISLAMIC REPUBLIC OF

Reporting Year: 2004

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-60	58			Y	N	N	2.000E+001	1975.01
	2.000E+001							
Co-60	34			N	Y	N	1.800E+001	1975.01
	1.800E+001							
Co-60		1		N	Y	N	1.900E+002	1975.01
		1.900E+002						
Cs-137	1			N	Y	N	3.700E-001	
	3.700E-001							
Cs-137		11		Y	N	N	6.100E+002	1975.01
		6.100E+002						
Sr-90	3			N	Y	N	1.900E+000	1990.01
	1.900E+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		1	N	Y	N	2.200E+001	
		2.200E+001					
Am-241	2	1	N	Y	N	3.700E+000	
	1.500E+000	2.200E+000					

Site (Structure) : CWMB

Country: IRAN, ISLAMIC REPUBLIC OF

Reporting Year: 2004

Full Name: Centralized Waste Management Building

Location: Tehran

Description:

Official Website:

License Holder(s): Waste Management Department(AEOI,TEHRAN,IRAN)

Waste management facilities that are located at this site:

Facility:	CWMF		
Description:	Centralized Waste Management Facility		
Processing part of facility		CWMF	
The following shows processing status for waste classes and SRS.			
Waste Class	Actual	Planned	
VLLW	No	No	
LLW	No	Yes	
ILW-SL	No	Yes	
LILW-LL	No	No	
HLW	No	No	
Type:	Treatment, Conditioning		
Year opened:	2003		

Site (Data) : CWMB

Stock of waste as at December 2004

Country: IRAN, ISLAMIC REPUBLIC OF

Reporting Year: 2004

Site Name: CWMB

Full Name: Centralized Waste Management Building

Inventory Reporting Date: December 2004

Waste Matrix Used: Iran

Processing - Treatment method(s)

Method	Status			
	Planned	R&D program	Current practice method use over the last 5 years	Past Practice
Chemical Precipitation	N	Y		N
Compaction	N	Y		N
Filtration	N	Y		N
Ion Exchange	N	Y		N
Membrane Technology	N	Y		N

Processing - Conditioning method(s)

Method	Status			
	Planned	R&D program	Current practice method use over the last 5 years	Past Practice
Cementation	N	Y		N
Grouting	N	Y		N

Site (Data) : CWMB

Stock of waste as at December 2004

Country: IRAN, ISLAMIC REPUBLIC OF

Reporting Year: 2004

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-60	199			Y	N	N	1.243E+002	2004.01
	1.243E+002							
Co-60	40	9		N	Y	N	1.125E+005	2004.01
	4.786E+000	1.125E+005						
Cs-137	4	5		N	Y	N	2.388E+002	2003.01
	3.711E-002	2.388E+002						
Cs-137	89	74		Y	N	N	5.585E+002	2004.01
	1.842E+002	3.743E+002						
Eu-152		1		N	Y	N	1.480E+002	2003.01
		1.480E+002						
Kr-85	4			N	Y	N	2.011E+000	2004.01
	2.011E+000							
Sr-90	4			N	Y	N	4.529E-003	2003.01
	4.529E-003							

Site (Data) : CWMB

Stock of waste as at December 2004

Country: IRAN, ISLAMIC REPUBLIC OF

Reporting Year: 2004

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		N	Y	N	1.850E+000	2003.01
	1.850E+000						
Am-241	1		N	Y	N	1.850E-004	2003.01
	1.850E-004						
Am-241	4		N	Y	N	1.517E-002	1973.01
	1.517E-002						
Ra-226	3		N	Y	N	5.500E-004	2004.01
	5.500E-004						
Ra-226	196		Y	N	Y	4.254E+001	2003.12
	4.254E+001						

Comment **# 7402: neutron generator**

The 1.85 GBq source cited is a neutron generator (AM-Be)

Site (Structure) : KRC

Country: IRAN, ISLAMIC REPUBLIC OF

Reporting Year: 2004

Full Name: Karaj Research Center

Location: Karaj City

Description:

Official Website:

License Holder(s): Waste Management Dept.

Waste management facilities that are located at this site:

Facility:	KSB					
Description:	Karaj Storage Building					
Storage part of facility KSB						
The following shows storage status for waste classes and SRS.						
Waste Class	Actual	Planned				
VLLW	No	No				
LLW	No	Yes				
ILW-SL	No	Yes				
LILW-LL	No	Yes				
HLW	No	No				
List SRS?	No					
List UMMT?	No					
Capacity:	Sufficient for 40 years.					
Types of Storage Units						
Storage Unit Name	Type Name	Year Opened	Closed?	Full?	Modular?	Contains SRS?
LILWstore	building	2003	No	No	Yes	No
SRSstore	pit	2003	No	No	No	No

Site (Structure) : LA

Country: IRAN, ISLAMIC REPUBLIC OF

Reporting Year: 2004

Full Name: Landfill Area

Location: Qom Desert

Description:

Official Website:

License Holder(s): Waste Management Dept.

Waste management facilities that are located at this site:

Site (Structure) : LA

Country: IRAN, ISLAMIC REPUBLIC OF

Reporting Year: 2004

Facility:	LA
Description:	Landfill Area

Disposal part of facility LA

The following shows disposal status for waste classes and SRS.

Waste Class	Actual	Planned
VLLW	Yes	Yes
LLW	No	No
ILW-SL	No	No
LILW-LL	No	No
HLW	No	No

List SRS?	No
List UMMT?	No

Type:	trench(es)		
Facility is modular?	Yes		
Capacity existing (m3):	20000	Capacity planned (m3):	100000

Depth (m):	3	Host medium:	sedimentary (other)
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Phase Name	Start Year	End Year	Estimate
planning and/or concept assessment	1974		False
site selection	1975		False
commissioning	1976		False
operation	1976		False

Site (Data) : LA

Stock of waste as at December 2004

Country: IRAN, ISLAMIC REPUBLIC OF

Reporting Year: 2004

Site Name: LA

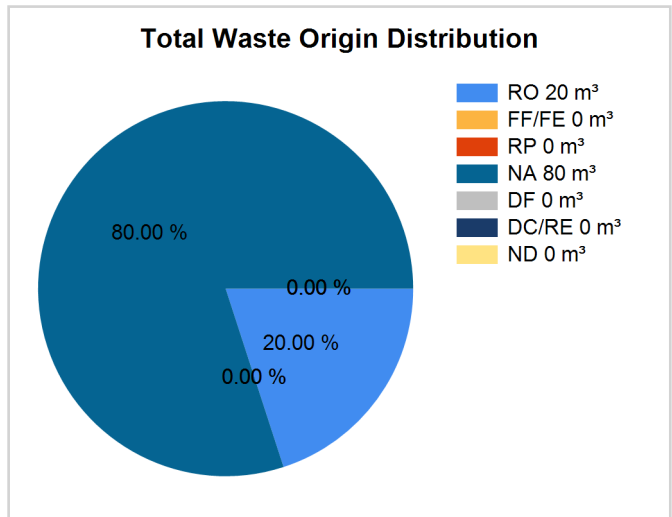
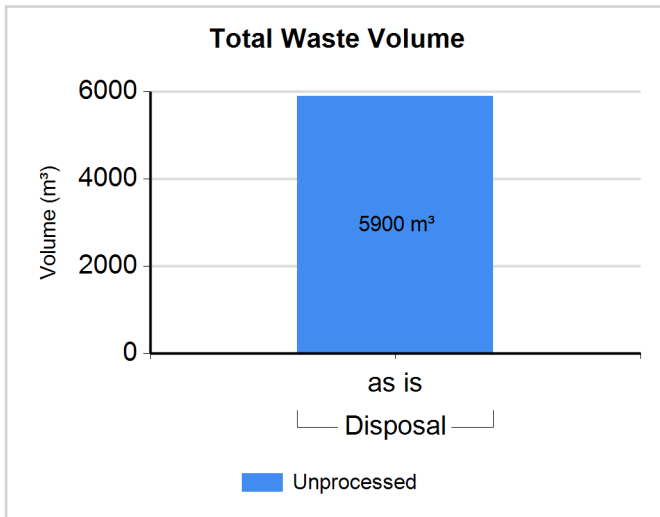
Full Name: Landfill Area

Inventory Reporting Date: December 2004

Waste Matrix Used: Iran

Waste Inventory

Est=distribution is an estimate, Proc.=Is the waste processed (Yes/No)? RO=Reactor Operations, FF/FE=Fuel Fabrication/Fuel Enrichment, RP=Reprocessing, NA=Nuclear Applications,DF=Defence, DC/RE=Decommissioning/Remediation, ND=Not Determined



Note: where volume "as dispo" is provided, volume "as is" is used in the graph instead.

Waste Class: VLLW

Waste Class Name	Location / Facility	Proc	Est.	Volume "as is" (m³)	Volume "as dispo" (m³)	RO %	FF/FE %	RP %	NA %	DF %	DC/RE %	ND %
VLLW	Disposal	N	Y	5900.000	5900.000	20.00	0.00	0.00	80.00	0.00	0.00	0.00

Regulators

Country: IRAN, ISLAMIC REPUBLIC OF

Reporting Year: 2004

Name:	INRA
Full Name:	Iranian Nuclear Regulatory Authority
Divison:	Nuclear Safety
City or Town:	Tehran
Main Website:	

Regulations / Laws

Country: IRAN, ISLAMIC REPUBLIC OF

Reporting Year: 2004

Name:	RS-RWM	
Title or Name:	Regulation and standards for the radioactive waste management	
Reference Number:	RCNS-CS-1	
Date Promulgated or Proclaimed:	1/1/1995	Regulation

Name:	BRSS	
Title or Name:	BASIC RADIATION SAFETY STANDARDS	
Reference Number:	NRPD-BRSS-1	
Date Promulgated or Proclaimed:	10/1/1999	Regulation

Name:	RPAI	
Title or Name:	Radiation Protection Act of Iran	
Reference Number:		
Date Promulgated or Proclaimed:	4/19/1989	Law

Name:	RWD	
Title or Name:	Radioactive waste discharges	
Reference Number:	NRPD-RWD-1	
Date Promulgated or Proclaimed:	12/1/2001	Regulation

Comment **# 5110: Wastes that are regulated by the Regulation**

Matrix Iran - LLW, VLLW from medical centers and hospitals

Milestones

Country: IRAN, ISLAMIC REPUBLIC OF

Reporting Year: 2004

Start Year or Reference Year:	2003	End Year:	
Description of Milestone:			
Beginning of a TC project with IAEA titled "Development of a reference design for near surface repository".			
Start Year or Reference Year:	2002	End Year:	
Description of Milestone:			
Commisioning of centralized waste management facility.			
Start Year or Reference Year:	2001	End Year:	2003
Description of Milestone:			
Technical co-operation with IAEA for development of National Waste Management Strategy.			
Start Year or Reference Year:	2001	End Year:	2002
Description of Milestone:			
Planning and area survey for NS Repository.			
Start Year or Reference Year:	1998	End Year:	2002
Description of Milestone:			
Direct co-operation with IAEA to obtain assistance in construction of a CWMF(Centralized waste management facility).			
Start Year or Reference Year:	1997	End Year:	
Description of Milestone:			
New efforts for development of WM infrastructure and requirements.			
Start Year or Reference Year:	1984	End Year:	
Description of Milestone:			
Refoundation of waste management department.			
Start Year or Reference Year:	1978	End Year:	
Description of Milestone:			
Cancellation of all nuclear programms.			
Start Year or Reference Year:	1977	End Year:	
Description of Milestone:			
Official foundation of WM office under nuclear fuel division of AEOL.			

Milestones

Country: IRAN, ISLAMIC REPUBLIC OF

Reporting Year: 2004

Start Year or Reference Year:	1977	End Year:	1978
Description of Milestone:			
Planning of WM infrastructure on the basis of 2300MW of nuclear electricity.			
Start Year or Reference Year:	1975	End Year:	1977
Description of Milestone:			
Official foundation of WM office under safety affairs Dept. of AEOI.			

Policies

Country: IRAN, ISLAMIC REPUBLIC OF

Reporting Year: 2004

National Systems

Policy		(Yes;Partially;No)
Q14	Has your Country implemented a national policy for radioactive waste management?	Partially
Comment	# 7104: Waste Mangement Policy	
	WM policy of Iran has been partially stated in the document titled "Natial Waste Management Strategy"(TC project IRA/04/033), finalized in Dec. 2003.	

Strategies		(Yes;Partially;No)
Q15	Has your country developed strategies to implement a national policy?	Yes
Comment	# 7218: NATIONAL STRATEGY	
	WM policy of Iran will be implemented through the national waste management strategy which has been documented as "Natial Waste Management Strategy"(TC project IRA/04/033), finalized in Dec. 2003.	

Requirements		(Yes;Partially;No)
Q17	identified the parties involved in the different steps of radioactive waste management	Yes
Q18	specified a rational set of safety, radiological and environmental protection objectives	Partially
Q19	implemented a mechanism to identify existing and anticipated radioactive wastes	Yes
Q20	implemented controls over radioactive waste generation	No
Q21	identified available methods and facilities to process, store and dispose of radioactive waste on an appropriate time-scale	Yes
Q22	taken into account interdependencies among all steps in radioactive waste generation and management	Partially
Q23	implemented appropriate research and development to support the operational and regulatory needs	Partially
Q24	implemented a funding structure and the allocation of resources that are essential for radioactive waste management	Yes
Q25	implemented formal mechanisms for disseminating information to the public and for public consultation	No

Policies

Country: IRAN, ISLAMIC REPUBLIC OF

Reporting Year: 2004

Responsibilities		(Complete;Incomplete)
Q28	establish and implement a legal framework for the management of radioactive waste	Complete
Q29	establish or designate a regulatory body that has the responsibility for carrying out the regulatory function with regard to safety and the protection of human health and the environment.	Complete
Q30	define the responsibilities of waste generators and operators of waste management facilities	Complete
Q31	provide for adequate resources	Incomplete
Q33	enforce compliance with regulatory requirements	Complete
Q34	implement the licensing process	Complete
Q35	advise the government	Complete
Q37	identify an acceptable destination for the radioactive waste	Incomplete
Q114	comply with legal requirements	Complete
Activities		(Yes;Partially;No)
Q43	perform safety and environmental impact assessments for radioactive waste management facilities	Partially
Q44	ensure adequate radiation protection for workers, the general public and the environment	Yes
Q45	ensure suitable staff, equipment, facilities, training and operating procedures are available to perform the safe radioactive waste management steps	Partially
Q46	establish and implement a quality assurance programme for the radioactive waste generated or its processing, storage and disposal	No
Q47	establish and keep records of appropriate information regarding the generation, processing, storage and disposal of radioactive waste, including an inventory of radioactive waste	Yes
Q48	provide surveillance and control of activities involving radioactive waste as required by the regulatory body	Yes
Q49	collect, analyze and, as appropriate, share operational experience to ensure continued safety improvements in radioactive waste management	Yes
Q50	conduct or otherwise ensure appropriate research and development to support operational needs in radioactive waste management	Yes
Clearance		(Yes;No)
Q128	Does your country have "clearly defined clearance levels based on radiological criteria, with policy statements that material below those levels can be recycled or disposed of with non-radioactive wastes"?	No
Q129	Has your country ever used a "case-by-case" approach to clearing radioactive wastes (excluding spent/disused sealed radioactive sources)?	Yes
Q130	Has your country ever used clearance levels to dispose of, reuse or recycle radioactive waste as non-radioactive waste or as a non-radioactive resource (excluding spent/disused sealed radioactive sources)?	No

Policies

Country: IRAN, ISLAMIC REPUBLIC OF

Reporting Year: 2004

Disposal Facilities

Licensing		(Yes - All;Yes - Some;No)
Q53	Environmental Assessment (EA)	Yes - Some
Q54	Environmental Impact Statement (EIS)	Yes - Some
Q55	Performance Assessment (PA)	No
Q56	Quality Assurance (QA)	Yes - Some
Q57	Safety Assessment (SA)	Yes - All
Q59	If Quality Assurance is part of your Country's current, waste disposal facility licensing policy, does the QA Program conform to international standards (such as the ISO9000 series)?	Yes - Some
Operation		(Yes - All;Yes - Some;No)
Q60	Does your Country have formal, documented waste acceptance criteria for its operating or proposed disposal facilities?	No
Post-Closure		(Yes;No)
Q61	Does your Country have any written policies to address the maintenance of records that describe the design, location and inventory of waste disposal facilities?	No
Q63	Does your Country have any written policies to address active institutional controls or passive institutional controls, such as monitoring or access restrictions?	No

Policies

Country: IRAN, ISLAMIC REPUBLIC OF

Reporting Year: 2004

Processing/Storage

Policies/Procedures		(Yes;No)
Q73	waste sorting/segregation	No
Q74	waste minimization	No
Q75	waste storage	No
Q76	processing and/or storing and/or disposing of nuclear fuel cycle waste separately from non-nuclear fuel cycle waste (also known as nuclear applications waste)	No
Q78	Does your country have any legislation, regulation, or policy that waste processing must take place prior to storage (see following note)	Yes
Implementation		(Yes;No)
Q80	Does your Country have any waste processing facilities at the same location where the waste is generated?	Yes
Q81	Does your Country have any centralized waste processing facilities?	Yes
Q82	Does your Country have any mobile waste processing facilities?	No
Foreign		(Yes;No)
Q121	Has your country sent any wastes or spent fuel to another country for processing (reprocessing for fuel)?	No
Q124	Has your country accepted any wastes or spent fuel from another country for processing (reprocessing for fuel)?	No

Policies

Country: IRAN, ISLAMIC REPUBLIC OF

Reporting Year: 2004

Spent/Disused SRS

Registration		(Yes;No)
Q84	Is there a national level registry?	Yes
Q85	If answer was yes, is the registry used only for disused/spent SRS?	Yes
Q87	Are there regional-level registries (one or more)?	No
Q90	Are there local-level registries (one or more)?	No
Procedures		(Yes;No)
Q91	Does your Country have documented procedures in place to ensure that sealed radioactive sources (SRS) are transferred to secure facilities in a timely manner after their user declares them to be spent?	Yes
Agreements		(Yes;No)
Q93	Government to Government agreements	No
Q94	Government - Supplier agreements	No
Q95	Supplier-User agreements	Yes
Q97	Do any agreements include suppliers that are outside of your Country?	Yes
Release / Disposal		(Yes;No)
Q99	Does your Country have any regulations to free-release spent sealed radioactive sources (SRS)?	No
Q100	Has your Country disposed of spent SRS in existing disposal facilities for LILW or HLW waste?	No
Q101	Does your Country plan to dispose of spent SRS in existing or planned disposal facilities for LILW or HLW waste?	Yes
Q102	Has your Country implemented dedicated disposal facilities for spent SRS?	No
Q103	Does your Country have plans to implement dedicated disposal facilities for spent SRS?	Yes
Import-Export		
Radioactive Waste		(Yes;No)
Q104	Does your Country have laws or Regulations restricting either the import or export of radioactive waste (excluding spent fuel)?	Yes
Spent Fuel		(Yes;No)
Q105	Does your Country have laws or Regulations restricting either the import or export of spent fuel?	No

Policies

Country: IRAN, ISLAMIC REPUBLIC OF

Reporting Year: 2004

Liquid HLW**Storage****(Yes;No)**

Q106 Does your Country have high-level liquid wastes in storage? No

UMMT**Responsibility****(Yes;No)**

Q110 Does your Country have any Uranium Mine and Mill Tailings sites that do not have a designated authority to manage them? No

Decommissioning**Funding****(Yes - All;Yes - Some;No)**

Q111 Does your Country require that funds should be set aside in support of future waste management activities, such as decommissioning activities? No

Facilities**(Yes;No)**

Q119 Does Your Country have any nuclear fuel cycle facilities? Yes

Q120 Does Your Country have any nuclear applications facilities (non fuel cycle facilities)? Yes

Timeframe**(Yes - All;Yes - Some;No)**

Q112 Does your Country require a time frame for the decommissioning of nuclear fuel cycle facilities once these facilities cease operation? No

Q113 Does your Country require a time frame for the decommissioning of non-nuclear fuel cycle facilities once these facilities cease operation? No

Future Outlook

Country: IRAN, ISLAMIC REPUBLIC OF

Reporting Year: 2004

Data not available.

Future Outlook

Country: IRAN, ISLAMIC REPUBLIC OF

Reporting Year: 2004

Data not available.

Future Outlook

Country: IRAN, ISLAMIC REPUBLIC OF

Reporting Year: 2004

Data not available.

Future Outlook

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Data not available.

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