

Country Waste Profile Report for AUSTRIA

Reporting Year: 2007

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: AUSTRIA Reporting Year: 2007

Waste Class Matrix: IAEA Def. This country does use the IAEA Scheme: No

Description: The Agency's standard matrix

	Distribution %			
Waste Class Name	VLLW	LLW	ILW	HLW
VLLW	100.0	0.0	0.0	0.0
LLW	0.0	100.0	0.0	0.0
ILW	0.0	0.0	100.0	0.0
HLW	0.0	0.0	0.0	100.0

Comment # 12228: Waste Matrix IAEA Def.

Effective from 1st January 2004, Nuclear Engineering Seibersdorf GmbH (NES) adopted the Commission Recommendation of 15 September 1999 on a classification system for solid radioactive waste 1999/669/EC, Euratom. This radioactive waste classification system is based on the IAEA classification scheme and has been accepted by the regulatory body; it is not defined in the present legislation (Chapter B5 of the JC Report 2005).

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

This country uses the IAEA standard definition:

	as-generated waste	processed for handling	processed for storage	processed for disposal
Jnprocessed means:	х			
Processed means:		x	x	х

Groups Overview

Country: AUSTRIA Reporting Year: 2007

Reporting Group:	NES
Inventory Reporting Date:	December 2007
Waste Matrix Used:	IAEA Def.
Description:	

Site Name	Facility Name	Fa	acilities Define	ed
NES	Cement fac	processing		
	Compactor	processing		
	Drier	processing		
	Incinerat	processing		
	Interim		storage	
	RawStorage		storage	
	Sorting	processing		
	WWTF	processing		

Attachment #1237: Reporting Group

2020_austrian_jcreport2006.pdf

The information for this submission was obtained from the Second National Report to the Joint Convention, 2005

Country: AUSTRIA Reporting Year: 2007

Full Name: Nuclear Engineering Seibersdorf GmbH

Location: A-2444 Seibersdorf, Austria

Description:

Official Website:

License Holder(s): Nuclear Engineering Seibersdorf GmbH

Comment # 12236: Site NES

The only radioactive waste management facility existing in Austria is the Nuclear Engineering Seibersdorf GmbH (NES), A-2444 Seibersdorf. NES is located at the site of the Austrian Research Centers Seibersdorf, south of Vienna.

Waste management facilities that are located at this site:

Facility:	Cement fac	
Description:	The main conditioning and immobilization method currently in use is cementation (grouting). With some exceptions, only steel 200-litre-drums are in use.	

Processing part of facility Cement fac

Waste CLass	Actual	Planned
VLLW	No	No
LLW	Yes	No
ILW	Yes	No
HLW	No	No

Type:	Conditioning
Year opened:	1995

Country: AUSTRIA Reporting Year: 2007

Facility:	Compactor	
·	Non burnable solid radioactive waste can be treated using the high-force compactor. Pellets formed in this way are transferred into 200-litre drums for storage. Depending on the waste characteristics, a volume reduction factor of 2 to 10 can be reached	

Processing part of facility Compactor

Waste CLass	Actual	Planned
VLLW	No	No
LLW	Yes	No
ILW	No	No
HLW	No	No

Type:	Treatment
Year opened:	1995

Country: AUSTRIA Reporting Year: 2007

Facility:	Drier	
Description:	Sludge drier: the facility is used for drying the sludge obtained in the Waste Water Treatment Facility and for liquid waste.	

Processing part of facility Drier

Waste CLass	Actual	Planned
VLLW	No	No
LLW	No	No
ILW	No	No
HLW	No	No

Type:	Treatment
Year opened:	1993

Country: AUSTRIA Reporting Year: 2007

Facility:	Incinerat
·	LILW incinerator: The shaft incinerator of "Karlsruhe" type is an excess air unit having a capacity of 40 kg/h and a combustion volume of d-1m and h-5m. The off-gas cleaning system consists of ceramic hot gas filters, quench, wet scrubber and HEPA-Filters

Processing part of facility Incinerat

Waste CLass	Actual	Planned
VLLW	No	No
LLW	No	No
ILW	No	No
HLW	No	No

Type:		Treatment
Year o	opened:	1983

Country: AUSTRIA Reporting Year: 2007

Facility:	Interim	
Description:	Interim Storage Facility for conditioned radioactive waste	

Storage part of facility Interim

The following shows storage status for waste classes and SRS.

Waste Class	Actual	Planned	
VLLW	No	No	
LLW	Yes	Yes	
ILW	Yes	Yes	
HLW	No	No	

List SRS?	No
List UMMT?	No

Capacity: The capacity is limited to 15,000 200-litre-drums

Types of Storage Units

Storage Unit Name	Type Name	Year Opened	Closed?	Full?	Modular?	Contains SRS?
Hall 1	building	0	No	No	Yes	No
Hall 2	building	0	No	No	Yes	No

Comment # 12239: Storage Facility Interim

All conditioned radioactive waste is stored within two dry engineered construction storage halls.

Country: AUSTRIA Reporting Year: 2007

Facility:	RawStorage	
Description:	Buffer storage facility for raw radioactive waste	

Storage part of facility RawStorage

The following shows storage status for waste classes and SRS.

Waste Class	Actual	Planned	
VLLW	No	No	
LLW	Yes	Yes	
ILW	Yes	Yes	
HLW	No	No	

List SRS?	No
List UMMT?	No

Capacity:

Types of Storage Units

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

Country: AUSTRIA Reporting Year: 2007

Facility:	Sorting	
	Segregation Facility: A special room ("sorting box") equipped with a negative pressure ventilation system is used for specific tasks, such as dismantling of larger equipment	

Processing part of facility Sorting

Waste CLass	Actual	Planned
VLLW	No	No
LLW	No	No
ILW	No	No
HLW	No	No

Type:	Treatment
Year opened:	1983

Country: AUSTRIA Reporting Year: 2007

Facility:	WWTF	
	Waste Water Treatment Facility: In this facility, waste water from the Nuclear Engineering Seibersdorf GmbH (NES) site in Seibersdorf is treated by precipitation and filtration.	

Processing part of facility WWTF

Waste CLass	Actual	Planned
VLLW	No	No
LLW	No	No
ILW	No	No
HLW	No	No

Type:	Treatment
Year opened:	1976

Site (Data): NES

Stock of waste as at December 2007

Country: AUSTRIA Reporting Year: 2007

Site Name: NES

Full Name: Nuclear Engineering Seibersdorf GmbH

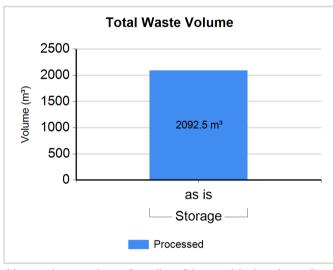
Inventory Reporting Date: December 2007 Waste Matrix Used: IAEA Def.

Comment # 12236: Site NES

The only radioactive waste management facility existing in Austria is the Nuclear Engineering Seibersdorf GmbH (NES), A-2444 Seibersdorf. NES is located at the site of the Austrian Research Centers Seibersdorf, south of Vienna.

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: LLW

Waste Class Name	Location / Facility	Proc	Est.	Volume "as is" (m³)	Volume "as dispo" (m³)	RO %	FF/FE %	RP %	NA %	DF %	DC/RE %	ND %
LLW	Storage / Interim	Υ	N	2036.100	2036.100	0.00	0.00	0.00	0.00	0.00	0.00	100.00

Waste Class: ILW

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	Storage / Interim	Υ	N	56.400	56.400	0.00	0.00	0.00	0.00	0.00	0.00	100.00

Site (Data): NES

Stock of waste as at December 2007

Country: AUSTRIA Reporting Year: 2007

Processing - Treatment method(s)

	Status					
Method	Planned	R&D program	Current practice method use over the last 5 years	Past Practice		
Chemical Precipitation	N	N	Same	N		
Filtration	N	N	Same	N		
Incineration	N	N	Same	N		
Segregation/Sorting	N	N	Same	N		
Super Compaction	N	N	Same	N		

Comment # 12242: Waste Treatment on Site NES

Annex L1 of the JC Report contains a brief description of all treatment and conditioning processes carried out at the Nuclear Engineering Seibersdorf GmbH (NES). The treatment methods over the last 5 years have been the same.

Processing - Conditioning method(s)

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

Regulators

Name:	FMAFEWM
Full Name:	Federal Minister of Agriculture, Forestry, Environment and Water Management
Divison:	V/7 - Radiation Protection
City or Town:	Vienna
Main Website:	

Regulations / Laws

Country: AUSTRIA Reporting Year: 2007

Name:	No-Nuclear					
Title or Name:	Constitutional Law on a Non-Nuclear Austria					
Reference Number:	149/1999					
Date Promulgated or Proclaimed:		8/13/1999	Law			

Name:	RadProAct			
Title or Name:	Radiation Protection Act as amended by BGBI. I Nr. 13/2006			
Reference Number:	BGBI. I Nr. 227/6	BGBI. I Nr. 227/69		
Date Promulgated or Proclaimed:		1/20/2006	Law	

Comment # 12230: Regulation RadProAct

Radiation Protection Act was first promulgated in 1969 (Federal Law Gazette no. 227/1969). Then it was amended by the Radiation Protection EU-Adaptation-Act 2002 (Federal Law Gazette I no. 146/2002) and by the Radiation Protection EU-Adaptation-Act 2004 (Federal Law Gazette I no. 137/2004).

Name:	Shipments		
Title or Name:	Ordinance on the Supervision and Control of Shipments of Radioactive Waste into, out of and through Austria		
Reference Number:	44/1997		
Date Promulgated or Proclaimed:		3/1/1997	Law

Comment # 12231: Regulation Shipments

This Ordinance implements Council Directive 92/3/EURATOM of 3 February 1992 on the Supervision and Control of Shipments of Radioactive Waste into, out of and through the Community".

Name:	MedicalOrd		
Title or Name:	Medical Radiation Protection Ordinance		
Reference Number:	409/2004		
Date Promulgated or Proclaimed:		1/1/2005	Law

Name:	AdmProced		
Title or Name:	General Administrative Procedures Act		
Reference Number:	BGBI. I Nr. 51/1991		
Date Promulgated or Proclaimed:		1/31/1991	Law

Regulations / Laws

Name:	170/1998		
Title or Name:	Act on Liability for Damage Caused by Radioactivity		
Reference Number:	170/1998		
Date Promulgated or Proclaimed:		1/1/1999	Law

Name:	Non-Prolif		
Title or Name:	Nuclear Non-Proliferation Act		
Reference Number:	BGBI. I Nr. 2/2008		
Date Promulgated or Proclaimed:		12/12/2006	Law

Name:	AdmDecis		
Title or Name:	Act on the Enforcement of Administration Decisions		
Reference Number:	53/1991		
Date Promulgated or Proclaimed:		1/1/1991	Law

Name:	EIA			
Title or Name:	Environmental Impact Assessment Act 2000			
Reference Number:	BGBI. I Nr. 2/200	BGBI. I Nr. 2/2008		
Date Promulgated or Proclaimed:		10/14/1993	Law	

Name:	EnvManag		
Title or Name:	Environmental Management Act		
Reference Number:	96/2001, as amended by I no. 99/2004		
Date Promulgated or Proclaimed:		8/3/2004	Law

Name:	Transport		
Title or Name:	Act on the Transport of Hazardous Goods		
Reference Number:	BGBI. I Nr.63/2007		
Date Promulgated or Proclaimed:		8/1/2007	Law

Regulations / Laws

Name:	InlandAct		
Title or Name:	Inland Navigation Act		
Reference Number:	62/1997		
Date Promulgated or Proclaimed:		1/1/1997	Law

Name:	Inspection		
Title or Name:	Labour Inspection Act		
Reference Number:	BGBI. I Nr. 159/2001		
Date Promulgated or Proclaimed:		4/1/1993	Law

Name:	RadProtOrd		
Title or Name:	General Radiation Protection Ordinance		
Reference Number:	191/2006		
Date Promulgated or Proclaimed:		6/1/2006	Law

International Atomic Energy Agend	ency
-----------------------------------	------

Page 1/1

NEWMDB Report

Milestones

Start Year or Reference Year:	2006	End Year:		
Description of Milestone:				
Exemption and clearance levels are laid down in the new Radiation Protection Ordinance which was put into force June 1st, 2006				

Country: AUSTRIA Reporting Year: 2007

National Systems

Policy	(Yes;Partially;No)

Q14 Has your Country implemented a national policy for radioactive waste management?

Yes

Comment # 14744: Policies National Systems-Policy

In the Radiation Protection Act 2004, the framework for radioctive waste mangement is defined. A contract between the Austrian Republic and NES, covering the sourcing for radwaste treatment, was closed.

Strategies (Yes;Partially	/;No)
--------------	---------------	-------

Q15 Has your country developed strategies to implement a national policy?

Partially

	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	Yes
Q19	implemented a mechanism to identify existing and anticipated radioactive wastes	Partially
Q20	implemented controls over radioactive waste generation	Yes
Q21	identified available methods and facilities to process, store and dispose of radioactive on an appropriate time-scale	waste Yes
Q22	taken into account interdependencies among all steps in radioactive waste generation management	and Yes
Q23	implemented appropriate research and development to support the operational and regulatory needs	Yes
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 puconsultation	ublic No

Comment # 14745: Policies National Systems-Requirements

The Radiation Protection Act requires thet before any use of radioactive material, a concept for the minmization of waste generation by this use ha s to be developped.

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		
Q31	provide for adequate resources	Complete
Q33	Q33 enforce compliance with regulatory requirements Cor	
Q34	implement the licensing process	Complete
Q35	advise the government	Complete
Q37	identify an acceptable destination for the radioactive waste	Complete
Q114	comply with legal requirements	Complete
Activities (Yes		Partially;No)
Q43	perform safety and environmental impact assessments for radioactive waste management facilities	Yes
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	Yes
Q46	Q46 establish and implement a quality assurance programme for the radioactive waste generated or its processing, storage and disposal	
Q47	Q47 establish and keep records of appropriate information regarding the generation, processing, storage and disposal of radioactive waste, including an inventory of radioactive waste	
Q48	provide surveillance and control of activities involving radioactive waste as required by the regulatory body	Yes
Q49	Q49 collect, analyze and, as appropriate, share operational experience to ensure continued safety improvements in radioactive waste management	
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"?	Yes
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)?		Yes

Country: AUSTRIA Reporting Year: 2007

Disposal Facilities

	Licensing	(Yes - All;Yes - Some;No)
Q53	Environmental Assessment (EA)	No
Q54	Environmental Impact Statement (EIS)	No
Q55	Performance Assessment (PA)	No
Q56	Quality Assurance (QA)	No
Q57	Safety Assessment (SA)	No
	Operation	(Yes - All;Yes - Some;No)
Q60	Does your Country have formal, documented waste acceptance criteria for it proposed disposal facilities?	s operating or No
	Post-Closure	(Yes;No)
Q61	Does your Country have any written policies to address the maintenance of describe the design, location and inventory of waste disposal facilities?	records that No

passive institutional controls, such as monitoring or access restrictions?

Country: AUSTRIA Reporting Year: 2007

Processing/Storage

	Policies/Procedures	(Yes;No)
Q73	waste sorting/segregation	Yes
Q74	waste minimization	Yes
Q75	waste storage	Yes
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	In your Country are there any waste processing facilities at the same location where the waste is generated?	Yes
Q81	In your Country are there any centralized waste processing facilities?	Yes
Q82	In your Country are there 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)?	Yes
Q122	Will some or all of the product(s) of processing/reprocessing be returned to your country?	Yes
Q123	Currently, are any of your country's wastes (processed or unprocessed, including the products of reprocessing) or spent fuel being stored in another country?	Yes
Q124	Has your country accepted any wastes or spent fuel from another country for processing (reprocessing for fuel)?	No

(Yes;No)

Policies

Country: AUSTRIA Reporting Year: 2007

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?	No		
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?	No		
	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)?	Yes		
Q100	Has your Country disposed of spent SRS in existing disposal facilities for LILW or HLW waste?	Yes		
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?	No		
Import-Export				

Q104 Does your Country have laws or Regulations restricting either the import or export of radioactive waste (excluding spent fuel)?		No
	Spent Fuel	(Yes;No)

Radioactive Waste

Country: AUSTRIA Reporting Year: 2007

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?

Yes - Some

Facilities (Yes;No)

Q119 Does Your Country have any nuclear fuel cycle facilities? No

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

Yes

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

Q113 Does your Country require a time frame for the decommissioning of non-nuclear fuel cycle Yes - Some facilities once these facilities cease operation?

Page 1/1

NEWMDB Report

Future Outlook

Country: AUSTRIA Reporting Year: 2007

Page 1/1

NEWMDB Report

Future Outlook

Country: AUSTRIA Reporting Year: 2007

Page 1/1

NEWMDB Report

Future Outlook

Country: AUSTRIA Reporting Year: 2007

Page 1/1

NEWMDB Report

Future Outlook

Country: AUSTRIA Reporting Year: 2007

Page 1/1

NEWMDB Report

Future Outlook

Country: AUSTRIA Reporting Year: 2007

Page 1/1

NEWMDB Report

Future Outlook

Country: AUSTRIA Reporting Year: 2007

Page 1/1

NEWMDB Report

Future Outlook

Country: AUSTRIA Reporting Year: 2007

Page 1/1

NEWMDB Report

Future Outlook

Country: AUSTRIA Reporting Year: 2007