



# **Country Waste Profile Report for ROMANIA 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](mailto:NEWMDB@IAEA.org)*

## Waste Classification Schemes

Country: ROMANIA

Reporting Year: 2004

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 **# 128: IAEA Matrix use**

The use of IAEA Def. matrix is not required by any law or regulation.  
The matrix is just being used to report-non-power wastes to the NEWMDB.

Waste Class Matrix: **NPP waste**

Description: type 1: nominal activity less than 7.5E09 Bq/m<sup>3</sup> (1 nominal Bq is the emission of 1 photon/sec of 0.8 MeV energy); or gamma dose rate less than 2 mGy/h at container surface  
type 2: nominal activity between 7.5E09 and 3.7E12 Bq/m<sup>3</sup>; or gamma dose rate between 2 mGy/h and 125 mGy/h at container surface  
type 3: nominal activity higher than 3.7E12 Bq/m<sup>3</sup>; or gamma dose rate higher than 125 mGy/h at container surface

Waste Class Name	Distribution %		
	LILW-SL	LILW-LL	HLW
type 1	100.0	0.0	0.0
type 2	40.0	60.0	0.0
type 3	0.0	100.0	0.0

Comment **# 129: NPP types of waste**

The NPP types of waste were established by the reference document of NPP RD-01364-RP1 (rev.3) "Solid Radioactive Waste Management Concept for Cernavoda NPP", approved by the regulatory authority (CNCAN) on 14 Nov.1994.

Comment **# 130: percentages in the NPP waste matrix**

The percentages in the NPP waste matrix were estimated based on best knowledge of the waste (not on detailed analytical information).The percentages will be modified after more information will be available.

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

Is not defined

## Groups Overview

Country: ROMANIA

Reporting Year: 2004

<b>Reporting Group:</b>	<b>Non-Power</b>
Inventory Reporting Date:	December 2004
Waste Matrix Used:	IAEA Def.
Description:	Non-Power group is reporting the waste originated from non-power application, except the uranium mining and milling waste, which is not reported in this database.

Site Name	Facility Name	Facilities Defined		
NIPNE	DNDR			disposal
	STDR-Mag	processing	storage	
NRI	LEPI		storage	
	STDR-Pit	processing		

<b>Reporting Group:</b>	<b>NPP</b>
Inventory Reporting Date:	December 2004
Waste Matrix Used:	NPP waste
Description:	NPP Group is reporting the waste stored at NPP Cernavoda site.

Site Name	Facility Name	Facilities Defined		
CNE - PROD	DIDR		storage	

## Site (Structure) : NIPNE

Country: ROMANIA

Reporting Year: 2004

Full Name: National Institute for Development&Research for Physics and Nuclear Engeneering - "Horia Hulubei"

Description:

Official Website:

License Holder(s): NIPNE, General Director dr. Nicolae Victor Zamfir,  
tel.:+(4021)4042300, fax:+(4021)4574440

Waste management facilities that are located at this site:

<b>Facility:</b>	<b>DNDR</b>
<b>Description:</b>	Disposal for LILW-SL and SL spent sources sited at Baita-Bihor, in a former uranium exploration mine (coastal gallery).

## Site (Structure) : NIPNE

Country: ROMANIA

Reporting Year: 2004

**Disposal part of facility**                      **DNDR**

The following shows disposal status for waste classes and SRS.

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

List SRS?	No
List UMMT?	No

Type:	rock cavern (mountain/hill)		
Facility is modular?	No		
Capacity existing (m3):	5000	Capacity planned (m3):	5000

Depth (m):	0-40 m	Host medium:	sedimentary (other)
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Phase Name	Start Year	End Year	Estimate
planning and/or concept assessment	1970	1972	False
site selection	1972	1975	False
design	1975	1977	False
construction	1978	1981	False
commissioning	1981	1985	False
operation	1985	2030	True
closure	2030	2035	False
institutional control	2035	2335	False

## Site (Structure) : NIPNE

Country: ROMANIA

Reporting Year: 2004

<b>Facility:</b>	<b>STDR-Mag</b>
<b>Description:</b>	Storage of LL spent sources and LILW-LL

**Storage part of facility STDR-Mag**

The following shows storage status for waste classes and SRS.

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

<b>List SRS?</b>	No
<b>List UMMT?</b>	No

<b>Capacity:</b>	
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## Types of Storage Units

Storage Unit Name	Type Name	Year Opened	Closed?	Full?	Modular?	Contains SRS?
Storage	building	1975	No	No	Yes	Yes

**Processing part of facility STDR-Mag**

The following shows processing status for waste classes and SRS.

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

<b>Type:</b>	Treatment, Conditioning
<b>Year opened:</b>	1975

## Site (Data) : NIPNE

Stock of waste as at December 2004

Country: ROMANIA

Reporting Year: 2004

**Site Name:** NIPNE

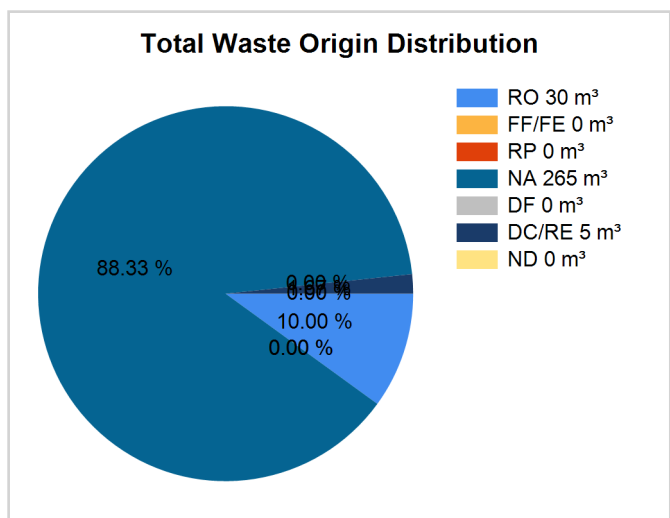
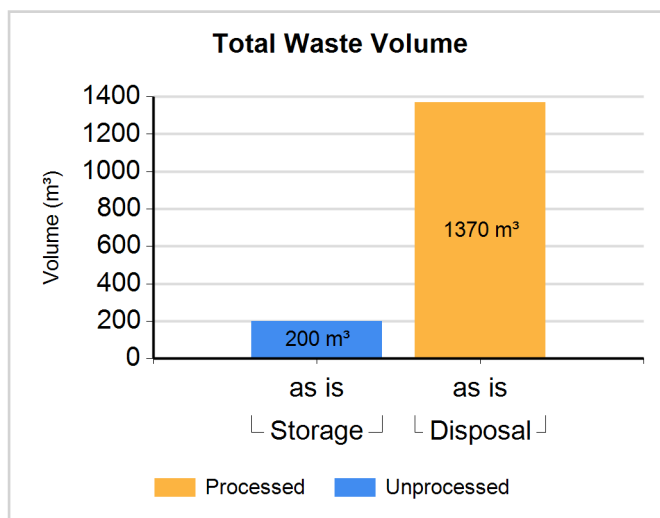
Full Name: National Institute for Development&amp;Research for Physics and Nuclear Engineering - "Horia Hulubei"

Inventory Reporting Date: December 2004

Waste Matrix Used: IAEA Def.

**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: LILW-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 %
LILW-SL	Storage	N	N	190.000	190.000	0.00	0.00	0.00	95.00	0.00	5.00	0.00
LILW-SL	Disposal	Y	N	1370.000	1370.000	30.00	0.00	0.00	70.00	0.00	0.00	0.00

Comment # 6610: The additional characteristics of the waste

Unprocessed: solid (non-dispersible)

**Waste Class: LILW-LL**

Waste Class Name	Location / Facility	Proc	Est.	Volume "as is" (m³)	Volume "as dispo" (m³)	RO %	FF/FE %	RP %	NA %	DF %	DC/RE %	ND %
LILW-LL	Storage	N	N	10.000	10.000	0.00	0.00	0.00	100.00	0.00	0.00	0.00

Comment # 6612: The additional characteristics of the waste

Unprocessed: solid (non-dispersible)

## Site (Data) : NIPNE

Stock of waste as at December 2004

Country: ROMANIA

Reporting Year: 2004

**Processing - Treatment method(s)**

Method	Status			
	Planned	R&D program	Current practice method use over the last 5 years	Past Practice
Chemical Precipitation	N	N	Suspended	N
Compaction	N	N	Same	N
Decontamination	N	N	Same	N
Evaporation	N	N	Suspended	N
Filtration	N	N	Suspended	N
Incineration	N	N	Same	N
Ion Exchange	N	N	Suspended	N
Shredding and Compaction	N	N	Same	N

Comment # 9745: Waste Treatment on Site NIPNE

The authorization of instalation for the treatment of liquid radioactive waste was suspended by competent authority (CNCAN).  
The owner of the instalation has the intention to purchase a new liquid treatment instalation.

**Processing - Conditioning method(s)**

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



## Site (Structure) : NRI

Country: ROMANIA

Reporting Year: 2004

Full Name: Authonomus Company for Nuclear Activities - Nuclear Research Institute Pitesti

Description:

Official Website:

License Holder(s): Authonomus Company for Nuclear Activities through Nuclear Research Institute  
Pitesti, Director prof.dr. Serban Constantin Valeca  
tel.:+(40248)213400, fax:+(40248)262449

Waste management facilities that are located at this site:

<b>Facility:</b>	<b>LEPI</b>					
<b>Description:</b>	Post irradiation laboratory, storing fuel fragments and high activity spent sources. The sources are stored in pits sited in hot cells.					
<b>Storage part of facility LEPI</b>						
The following shows storage status for waste classes and SRS.						
<b>Waste Class</b>	<b>Actual</b>	<b>Planned</b>				
LILW-SL	Yes	Yes				
LILW-LL	Yes	Yes				
HLW	Yes	Yes				
<b>List SRS?</b>	No					
<b>List UMMT?</b>	No					
<b>Capacity:</b>						
<b>Types of Storage Units</b>						
<b>Storage Unit Name</b>	<b>Type Name</b>	<b>Year Opened</b>	<b>Closed?</b>	<b>Full?</b>	<b>Modular?</b>	<b>Contains SRS?</b>
Stor.cells	pit	1985	No	No	Yes	Yes

## Site (Structure) : NRI

Country: ROMANIA

Reporting Year: 2004

<b>Facility:</b>	<b>STDR-Pit</b>		
<b>Description:</b>	Radioactive waste treatment facility for LILW-SL (solid&liquid radwaste)		
<b>Processing part of facility</b> <b>STDR-Pit</b>			
The following shows processing status for waste classes and SRS.			
<b>Waste Class</b>	<b>Actual</b>	<b>Planned</b>	
LILW-SL	Yes	No	
LILW-LL	Yes	No	
HLW	No	No	
<b>Type:</b>	Treatment, Conditioning		
<b>Year opened:</b>	1978		

## Site (Data) : NRI

Stock of waste as at December 2004

Country: ROMANIA

Reporting Year: 2004

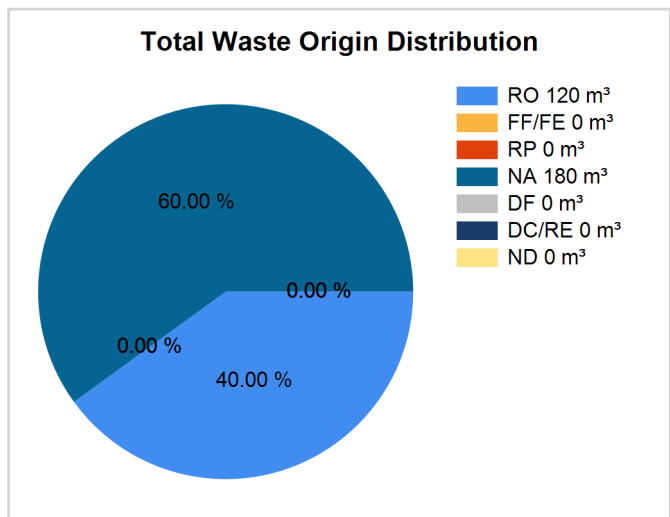
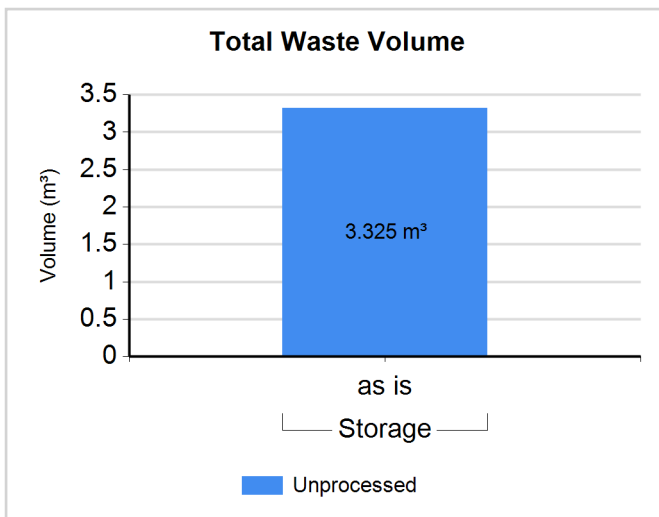
**Site Name:** NRIFull Name: Authonomus Company for Nuclear Activities - Nuclear Research  
Institute Pitesti

Inventory Reporting Date: December 2004

Waste Matrix Used: IAEA Def.

**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:** LILW-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 %
LILW-SL	Storage	N	N	2.000	2.000	0.00	0.00	0.00	100.00	0.00	0.00	0.00

Comment # 6614: The additional characteristics of the waste

Unprocessed: solid (dispersible), solid (non-dispersible)

**Waste Class:** LILW-LL

Waste Class Name	Location / Facility	Proc	Est.	Volume "as is" (m³)	Volume "as dispo" (m³)	RO %	FF/FE %	RP %	NA %	DF %	DC/RE %	ND %
LILW-LL	Storage	N	N	1.300	1.300	20.00	0.00	0.00	80.00	0.00	0.00	0.00

Comment # 6615: The additional characteristics of the waste

Unprocessed: solid (dispersible), solid (non-dispersible)

**Waste Class:** HLW

Waste Class Name	Location / Facility	Proc	Est.	Volume "as is" (m³)	Volume "as dispo" (m³)	RO %	FF/FE %	RP %	NA %	DF %	DC/RE %	ND %
HLW	Storage	N	N	0.025	0.025	100.00	0.00	0.00	0.00	0.00	0.00	0.00

Comment # 6616: The additional characteristics of the waste

Unprocessed: solid (dispersible), solid (non-dispersible)

## Site (Data) : NRI

Stock of waste as at December 2004

Country: ROMANIA

Reporting Year: 2004

**Processing - Treatment method(s)**

Method	Status			
	Planned	R&D program	Current practice method use over the last 5 years	Past Practice
Decontamination	N	N	Same	N
Evaporation	N	N	Same	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
Bituminization	N	N	Same	N
Cementation	N	N	Same	N

## Site (Structure) : CNE - PROD

Country: ROMANIA

Reporting Year: 2004

Full Name: National Company NUCLEARELECTRICA, CNE -PROD

Description:

Official Website:

License Holder(s): National Company NUCLEARELECTRICA, CNE -PROD,  
General Director Theodor Chirica, tel.:+(401)3120800, fax:+(401)3120800

Waste management facilities that are located at this site:

<b>Facility:</b>	<b>DIDR</b>
<b>Description:</b>	Storage facility for operational radioactive waste.

**Storage part of facility DIDR**

The following shows storage status for waste classes and SRS.

Waste Class	Actual	Planned
type 1	Yes	Yes
type 2	Yes	Yes
type 3	No	No

List SRS?	No
List UMMT?	No

Capacity:	1400 cubic meters
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## Types of Storage Units

Storage Unit Name	Type Name	Year Opened	Closed?	Full?	Modular?	Contains SRS?
DIDR	building	1996	No	No	No	No

## Site (Data) : CNE - PROD

Stock of waste as at December 2004

Country: ROMANIA

Reporting Year: 2004

**Site Name:** CNE - PROD

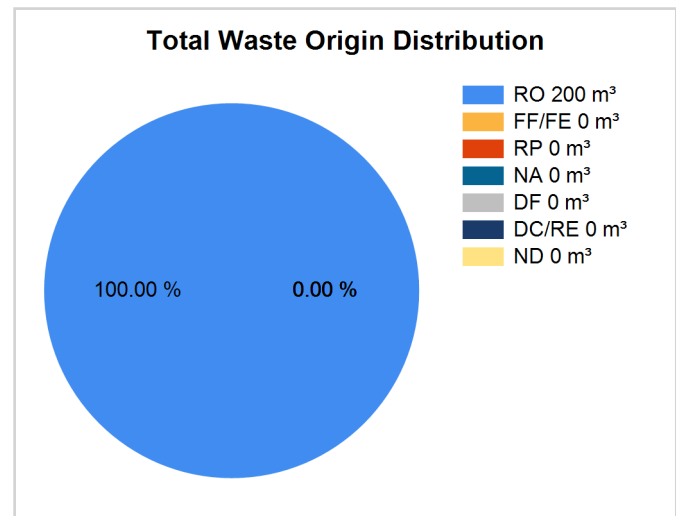
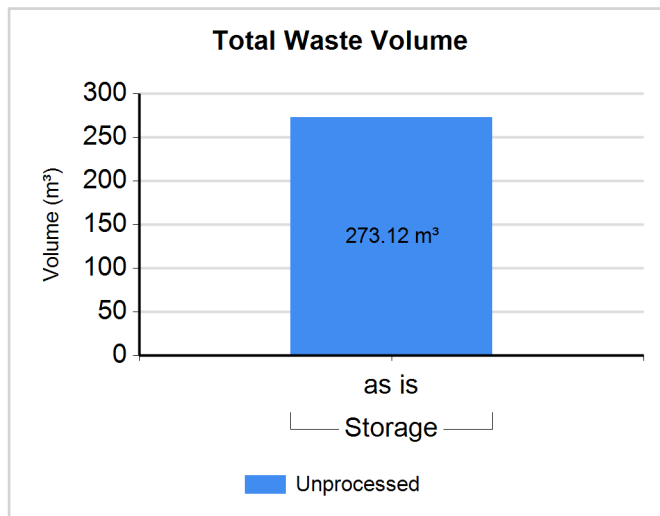
Full Name: National Company NUCLEARELECTRICA, CNE -PROD

Inventory Reporting Date: December 2004

Waste Matrix Used: NPP waste

**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: type 1**

Waste Class Name	Location / Facility	Proc	Est.	Volume "as is" (m³)	Volume "as dispo" (m³)	RO %	FF/FE %	RP %	NA %	DF %	DC/RE %	ND %
type 1	Storage	N	N	208.270	208.270	100.00	0.00	0.00	0.00	0.00	0.00	0.00

Comment # 6617: The additional characteristics of the waste

Unprocessed: flammable, liquid (organic), resin, solid (dispersible), solid (non-dispersible)

**Waste Class: type 2**

Waste Class Name	Location / Facility	Proc	Est.	Volume "as is" (m³)	Volume "as dispo" (m³)	RO %	FF/FE %	RP %	NA %	DF %	DC/RE %	ND %
type 2	Storage	N	N	64.850	64.850	100.00	0.00	0.00	0.00	0.00	0.00	0.00

Comment # 6618: The additional characteristics of the waste

Unprocessed: flammable, liquid (organic), resin, solid (dispersible), solid (non-dispersible)

## Regulators

Country: ROMANIA

Reporting Year: 2004

<b>Name:</b>	<b>CNCAN</b>
Full Name:	National Commission for Nuclear Activities Control
Divison:	Radiation Protection and Radioactive Waste Section
City or Town:	Bucharest
Main Website:	

Comment **# 6607: Wastes that are regulated by the Regulator**

Matrix IAEA Def. - HLW, LILW-LL, LILW-SL; Matrix NPP waste - type 1, type 2, type 3

## Regulations / Laws

Country: ROMANIA

Reporting Year: 2004

<b>Name:</b>	<b>Law 111</b>	
Title or Name:	Law 111/1996 (as amended) on safe conduct of nuclear activities	
Reference Number:	111/1996	
Date Promulgated or Proclaimed:	12/28/1996	Law

Comment **# 6608: Wastes that are regulated by the Law**  
 Matrix IAEA Def. - HLW, LILW-LL, LILW-SL; Matrix NPP waste - type 1, type 2, type 3

<b>Name:</b>	<b>RSR-01</b>	
Title or Name:	Radiation Safety Fundamental Norms approved by the order of the President of National Commission for Nuclear Activities Control	
Reference Number:	Order 14/2001	
Date Promulgated or Proclaimed:	8/29/2000	Regulation

Comment **# 6609: Wastes that are regulated by the Regulation**  
 Matrix IAEA Def. - HLW, LILW-LL, LILW-SL; Matrix NPP waste - type 1, type 2, type 3

<b>Name:</b>	<b>NDR-01</b>	
Title or Name:	Fundamentals Norms for the Safe Management of Radioactive Waste	
Reference Number:	president order no. 56/2004	
Date Promulgated or Proclaimed:	5/4/2004	Regulation

Comment **# 9739: Regulation NFGSDR**  
 The regulation NFGSDR is based on the IAEA Safety Series 111-F" The Principles of Radioactive Waste Management" and contains the principles of radioactive waste management as well as the requirements for fulfilling of these principles.

<b>Name:</b>	<b>NDR-02</b>	
Title or Name:	Norms for the clearance levels of radioactive originated by nuclear activities	
Reference Number:	president order no. 62/2004	
Date Promulgated or Proclaimed:	5/4/2004	Regulation



## Regulations / Laws

Country: ROMANIA

Reporting Year: 2004

<b>Name:</b>	<b>Law 320</b>	
<b>Title or Name:</b>	Law no. 320/2003 on the management including disposal of nuclear spent fuel and radioactive waste	
<b>Reference Number:</b>	Law no. 320/2003 on the approval of GO no. 11/2003	
<b>Date Promulgated or Proclaimed:</b>	7/22/2003	Law

Comment **# 9738: Regulation 320/2003**

The law establish the legislative framework for the management of nuclear spent fuel and radioactive waste . According to this law the National Agency for Radioactive Waste(ANDRAD) is set up. ANDRAD is an authority which has as the main role the coordination of at the national level of the process of safe management of nuclear spent fuel and radioactive waste resulted from operation of research reactors, nuclear power plants, decommissioning of nuclear and radiological facilities and of radioactive waste resulted from application of radiation in industry, medicine, etc.

<b>Name:</b>	<b>Law 105</b>	
<b>Title or Name:</b>	Law no. 105/1999 on the ratification of the Vienna Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management	
<b>Reference Number:</b>	Law 105/1999	
<b>Date Promulgated or Proclaimed:</b>	6/16/1999	Law

## Future Outlook

Country: ROMANIA

Reporting Year: 2004

**Data not available.**

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**Data not available.**

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