



# **Country Waste Profile Report for UKRAINE Reporting Year: 2008**

*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: UKRAINE

Reporting Year: 2008

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: **Ukraine**

Yes

Description: Low-Active Radioactive Waste:  
 For alpha emitters: 1E-1 - 1E+2 kBq/kg;  
 Transuranic: 0,1 kBq/kg;  
 Other alpha emitters: 1 kBq/kg;  
 For beta, gamma emitters: 1E+1 - 1E+4 kBq/kg.

Mid-Active Radioactive Waste:  
 For alpha emitters: 1E+5 - 1E+8 kBq/kg;  
 Transuranic: 0,1 kBq/kg;  
 Other alpha emitters: 1 kBq/kg;  
 For beta, gamma emitters: 1E+3 - 1E+6 kBq/kg.

High-Active Radioactive Waste:  
 Thermal power above about 2 kW/m<sup>3</sup>.

Waste Class Name	Distribution %			
	VLLW	LLW	ILW	HLW
Mid-Active	0.0	99.0	1.0	0.0
Low-Active	0.0	99.0	1.0	0.0
High-Active	0.0	0.0	0.0	100.0

Comment **# 148: % in the matrix**

% in the matrix were based on preliminary data of State RW inventory, which was held in 1999.

Comment **# 149: Classification scheme**

This classification scheme is required by a regulation "Main Sanitary Rules of Radiation Protection", SSR 6.074.120-01, Kiev, 2001

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

This country uses the following definitions:

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

## Groups Overview

Country: UKRAINE

Reporting Year: 2008

<b>Reporting Group:</b>	<b>ChNPP</b>
Inventory Reporting Date:	December 2008
Waste Matrix Used:	Ukraine
Description:	Reporting group ChNPP - Chernobyl NPP

Site Name	Facility Name	Facilities Defined	
Chorn NPP	SLRW	storage	
	SSRW	storage	

<b>Reporting Group:</b>	<b>NNEC</b>
Inventory Reporting Date:	December 2008
Waste Matrix Used:	Ukraine
Description:	Reporting group NNEC - National Nuclear Energy Generating Company, which include Khmelnitsky NPP, Rivne NPP, South-Ukraine NPP and Zaporizhzhya NPP

Site Name	Facility Name	Facilities Defined	
Khmel NPP	FROI	processing	
	SLRW	storage	
	SSRW	storage	
Rivne NPP	BF	processing	
	SLRW	storage	
	SSHRW1,2	storage	
	SSRW	storage	
SU NPP	SLRW	storage	
	SSRW	storage	
Zap NPP	IF	processing	
	PF	processing	
	SLRW	storage	
	SSRW	storage	

<b>Reporting Group:</b>	<b>RADON</b>
Inventory Reporting Date:	December 2008
Waste Matrix Used:	Ukraine
Description:	Reporting group RADON - State association "RADON", which include Dnipropetrovsk, Donetsk, Kiev, Kharkov, Lviv, Odessa Special enterprises and Special enterprise "Komplex"

## Groups Overview

Country: UKRAINE

Reporting Year: 2008

Site Name	Facility Name	Facilities Defined		
Dnpr SE	Module 2			disposal
	Module 4		storage	
	Module 5			disposal
	Module1			disposal
	SRS 1			disposal
Kh SE	FAC 1	processing		
	FAC 2	processing		
	Module 1			disposal
	Module 18			disposal
	Module 19			disposal
	Module 20			disposal
	Module 21		storage	
	PIPE		storage	
	SRS 15-16			disposal
	SRS 17			disposal
Kiev SE	LRW		storage	
	Modul 8-10			disposal
	Module 5-7			disposal
	SRS 1-6			disposal
	Stor 2		storage	
LvivSE	LRW		storage	
	Module 1			disposal
	Module 2			disposal
	Module 3			disposal
	Module 4			disposal
	Module 5			disposal
	Module 7			disposal
	Module 8			disposal
	Module B			disposal
	SRS 1			disposal
	SRS 2			disposal
	SRS 3			disposal
	Odessa SE	LRW		storage
Modul 1				disposal
Modul 14			storage	

## Groups Overview

Country: UKRAINE

Reporting Year: 2008

	SRS 1			disposal
	SRS 2			disposal
	Stor 15		storage	
SE Komplex	PTLRW		storage	
	PZRW			disposal
SE Tech	Vector			disposal

## Site (Structure) : Chorn NPP

Country: UKRAINE

Reporting Year: 2008

Full Name: Chornobyl nuclear power plant  
 Location: Slavutych, Ukraine, 07100  
 Description:  
 Official Website:  
 License Holder(s): Chornobyl nuclear power plant  
 General Director: Gramotkin Igor  
 Tel: +38 04479 2 56 70  
 Fax: +38 04479 2 63 59

Waste management facilities that are located at this site:

<b>Facility:</b>	<b>SLRW</b>					
<b>Description:</b>	Tanks for liquid radioactive waste storage					
<b>Storage part of facility SLRW</b>						
The following shows storage status for waste classes and SRS.						
<b>Waste Class</b>	<b>Actual</b>	<b>Planned</b>				
Mid-Active	Yes	Yes				
Low-Active	Yes	Yes				
High-Active	No	No				
<b>List SRS?</b>	No					
<b>List UMMT?</b>	No					
<b>Capacity:</b>	SLRW1 total volume is 26000m3 SLRW2 total volume is 12000m3					
<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>
SLRW1	tank (stainless steel)	1977	No	No	Yes	No
SLRW2	tank (stainless steel)	1982	No	No	Yes	No

## Site (Structure) : Chorn NPP

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>SSRW</b>
<b>Description:</b>	Building for solid radioactive waste storage

**Storage part of facility                      SSRW**

The following shows storage status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	Yes	Yes
Low-Active	Yes	Yes
High-Active	Yes	Yes

List SRS?	No
List UMMT?	No

Capacity:	4000 m3
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## Types of Storage Units

Storage Unit Name	Type Name	Year Opened	Closed?	Full?	Modular?	Contains SRS?
SSRW 2	building	1978	No	No	Yes	No
SSRW 1	building	1978	No	No	Yes	No

Site (Data) : Chorn NPP

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

Site Name: Chorn NPP

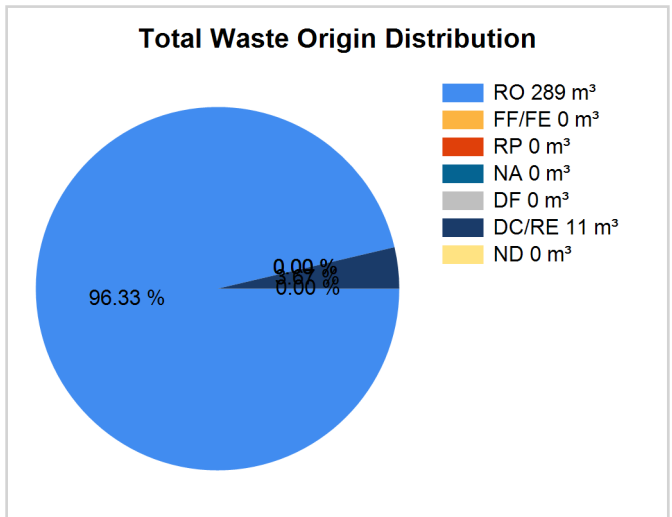
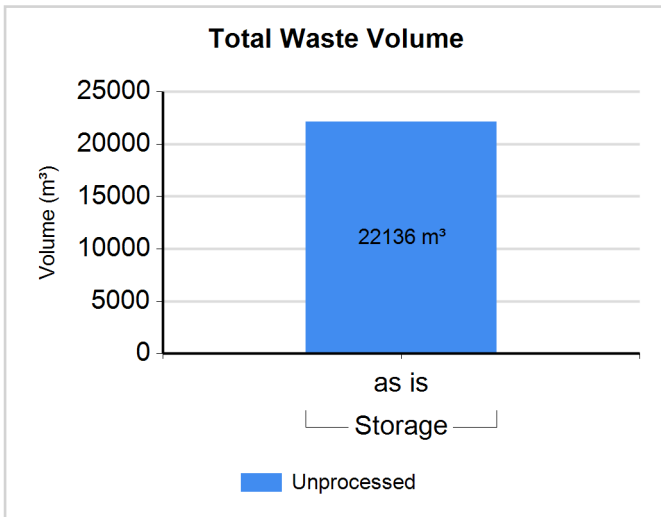
Full Name: Chornobyl nuclear power plant

Inventory Reporting Date: December 2008

Waste Matrix Used: Ukraine

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.



## Site (Data) : Chorn NPP

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

**Waste Class: Mid-Active**

Waste Class Name	Location / Facility	Proc	Est.	Volume "as is" (m <sup>3</sup> )	Volume "as dispo" (m <sup>3</sup> )	RO %	FF/FE %	RP %	NA %	DF %	DC/RE %	ND %
Mid-Active	Storage	N	N	20454.000	20454.000	92.00	0.00	0.00	0.00	0.00	8.00	0.00

Comment **# 6835: The additional characteristics of the waste**

Unprocessed: flammable, hazardous (chemical), liquid (aqueous), liquid (organic), resin, sludge, solid (dispersible), solid (non-dispersible)

**Waste Class: Low-Active**

Waste Class Name	Location / Facility	Proc	Est.	Volume "as is" (m <sup>3</sup> )	Volume "as dispo" (m <sup>3</sup> )	RO %	FF/FE %	RP %	NA %	DF %	DC/RE %	ND %
Low-Active	Storage	N	N	1174.000	1174.000	99.00	0.00	0.00	0.00	0.00	1.00	0.00

Comment **# 6836: The additional characteristics of the waste**

Unprocessed: flammable, hazardous (chemical), liquid (aqueous), liquid (organic), resin, sludge, solid (dispersible), solid (non-dispersible)

**Waste Class: High-Active**

Waste Class Name	Location / Facility	Proc	Est.	Volume "as is" (m <sup>3</sup> )	Volume "as dispo" (m <sup>3</sup> )	RO %	FF/FE %	RP %	NA %	DF %	DC/RE %	ND %
High-Active	Storage	N	N	508.000	508.000	98.00	0.00	0.00	0.00	0.00	2.00	0.00

Comment **# 6837: The additional characteristics of the waste**

Unprocessed: flammable, hazardous (chemical), liquid (aqueous), liquid (organic), resin, sludge, solid (dispersible), solid (non-dispersible)

## Site (Structure) : Khmel NPP

Country: UKRAINE

Reporting Year: 2008

Full Name: Khmelnitsky nuclear power plant

Location: Neteshyn, Ukraine, 30100

Description:

Official Website:

License Holder(s): National nuclear energy generating company

President: Nedashkovskiy Yury

Tel: +38 044 294 48 70

Fax: +38 044 294 48 83

Director: Panaschenko Mykola

Tel: +38 03848 3 33 50

Fax: +38 03848 3 33 60

Waste management facilities that are located at this site:

<b>Facility:</b>	<b>FROI</b>	
<b>Description:</b>	Facility for radioactive oil incineration	
<b>Processing part of facility FROI</b>		
The following shows processing status for waste classes and SRS.		
<b>Waste Class</b>	<b>Actual</b>	<b>Planned</b>
Mid-Active	No	No
Low-Active	No	No
High-Active	No	No
<b>Type:</b>	Treatment	
<b>Year opened:</b>	2001	

## Site (Structure) : Khmel NPP

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>SLRW</b>					
<b>Description:</b>	Tanks for liquid radioactive waste storage					
<b>Storage part of facility                      SLRW</b>						
The following shows storage status for waste classes and SRS.						
<b>Waste Class</b>	<b>Actual</b>	<b>Planned</b>				
Mid-Active	Yes	Yes				
Low-Active	Yes	Yes				
High-Active	No	No				
<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>
SLRW	tank (stainless steel)	1987	No	No	Yes	No

## Site (Structure) : Khmel NPP

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>SSRW</b>
<b>Description:</b>	Moduls for solid radioactive waste storage

**Storage part of facility                      SSRW**

The following shows storage status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	Yes	Yes
Low-Active	Yes	Yes
High-Active	Yes	Yes

<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?
SSRW-1	building	1987	No	No	Yes	No
SSRW-2	building	2002	No	No	Yes	No

## Site (Data) : Khmel NPP

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

**Site Name:** Khmel NPP

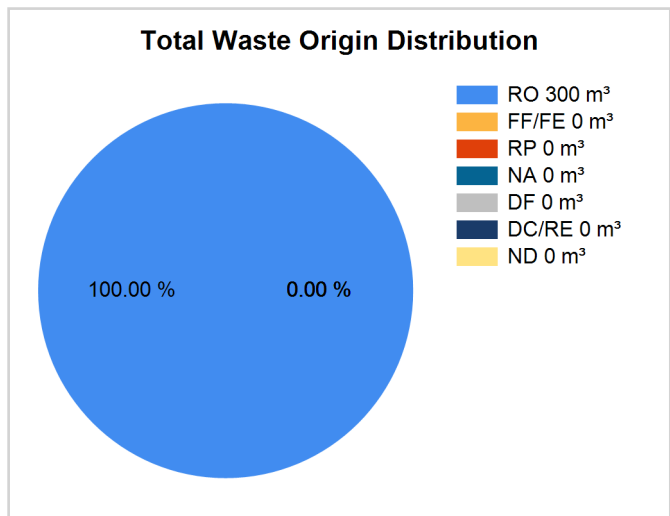
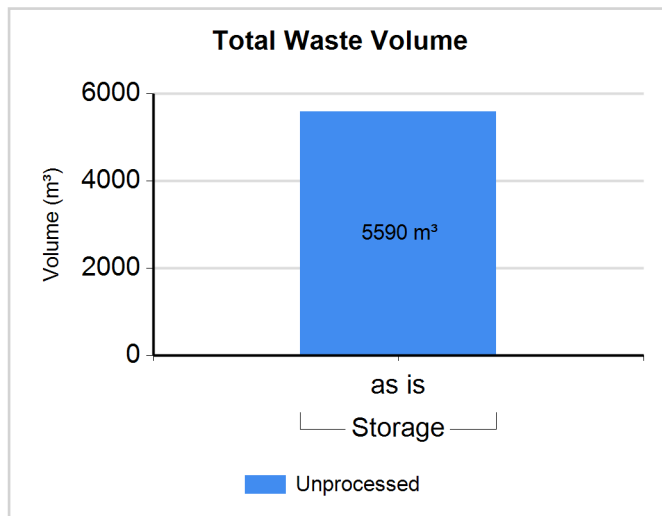
Full Name: Khmelnitsky nuclear power plant

Inventory Reporting Date: December 2008

Waste Matrix Used: Ukraine

**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: Mid-Active**

Waste Class Name	Location / Facility	Proc	Est.	Volume "as is" (m³)	Volume "as dispo" (m³)	RO %	FF/FE %	RP %	NA %	DF %	DC/RE %	ND %
Mid-Active	Storage	N	N	1571.000	1571.000	100.00	0.00	0.00	0.00	0.00	0.00	0.00

Comment # 6826: The additional characteristics of the waste

Unprocessed: explosive, flammable, hazardous (chemical), liquid (aqueous), liquid (organic), resin, sludge, solid (dispersible), solid (non-dispersible)  
 Processed: liquid (organic)

**Waste Class: Low-Active**

Waste Class Name	Location / Facility	Proc	Est.	Volume "as is" (m³)	Volume "as dispo" (m³)	RO %	FF/FE %	RP %	NA %	DF %	DC/RE %	ND %
Low-Active	Storage	N	N	4010.000	4010.000	100.00	0.00	0.00	0.00	0.00	0.00	0.00

Comment # 6827: The additional characteristics of the waste

Unprocessed: explosive, flammable, hazardous (chemical), liquid (aqueous), liquid (organic), resin, sludge, solid (dispersible), solid (non-dispersible)

**Waste Class: High-Active**

Waste Class Name	Location / Facility	Proc	Est.	Volume "as is" (m³)	Volume "as dispo" (m³)	RO %	FF/FE %	RP %	NA %	DF %	DC/RE %	ND %
High-Active	Storage	N	N	9.000	9.000	100.00	0.00	0.00	0.00	0.00	0.00	0.00

Comment # 6828: The additional characteristics of the waste

Unprocessed: explosive, flammable, hazardous (chemical), liquid (aqueous), liquid (organic), resin, sludge, solid (dispersible), solid (non-dispersible)

## Site (Data) : Khmel NPP

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

**Processing - Treatment method(s)**

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

## Site (Structure) : Rivne NPP

Country: UKRAINE

Reporting Year: 2008

Full Name: Rivne nuclear power plant

Location: Kuznetsovsk, Ukraine, 34400

Description:

Official Website:

License Holder(s): National nuclear energy generating company  
 President: Nedashkovskiy Yury  
 Tel: +38 044 294 48 70  
 Fax: +38 044 294 48 83  
 Director: Fridman Mykola  
 Tel: +38 03636 2 23 14  
 Fax: +38 03636 2 23 60

Waste management facilities that are located at this site:

<b>Facility:</b>	<b>BF</b>	
<b>Description:</b>	Facility for radioactive waste bituminization	
<b>Processing part of facility                      BF</b>		
The following shows processing status for waste classes and SRS.		
<b>Waste Class</b>	<b>Actual</b>	<b>Planned</b>
Mid-Active	No	No
Low-Active	No	No
High-Active	No	No
<b>Type:</b>	Conditioning	
<b>Year opened:</b>	2001	

## Site (Structure) : Rivne NPP

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>SLRW</b>
<b>Description:</b>	Tanks for liquid radioactive waste storage

**Storage part of facility                      SLRW**

The following shows storage status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	Yes	Yes
Low-Active	Yes	Yes
High-Active	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?
SLRW1	tank (stainless steel)	1980	No	No	Yes	No
SLRW2	tank (stainless steel)	1986	No	No	Yes	No



## Site (Structure) : Rivne NPP

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>SSHRW1,2</b>
<b>Description:</b>	Modul for solid high-radioactive waste storage

**Storage part of facility                      SSHRW1,2**

The following shows storage status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	No	No
Low-Active	No	No
High-Active	Yes	Yes

<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?
SSHRW1,2	building	1980	No	No	Yes	No

## Site (Structure) : Rivne NPP

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>SSRW</b>
<b>Description:</b>	Moduls for solid radioactive waste storage

**Storage part of facility                      SSRW**

The following shows storage status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	Yes	Yes
Low-Active	Yes	Yes
High-Active	No	No

List SRS?	No
List UMMT?	No

Capacity:	
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## Types of Storage Units

Storage Unit Name	Type Name	Year Opened	Closed?	Full?	Modular?	Contains SRS?
SSRW1,2	building	1980	No	No	Yes	No
SSRW3	building	1986	No	No	Yes	No
SSRW4	building	2001	No	No	Yes	No

Site (Data) : Rivne NPP

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

Site Name: Rivne NPP

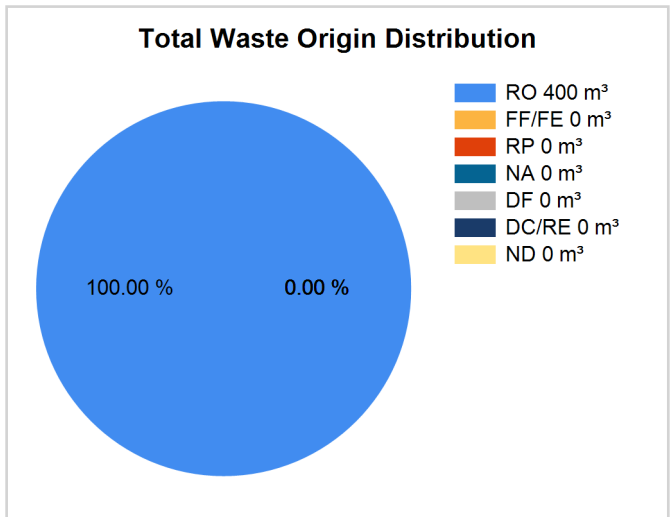
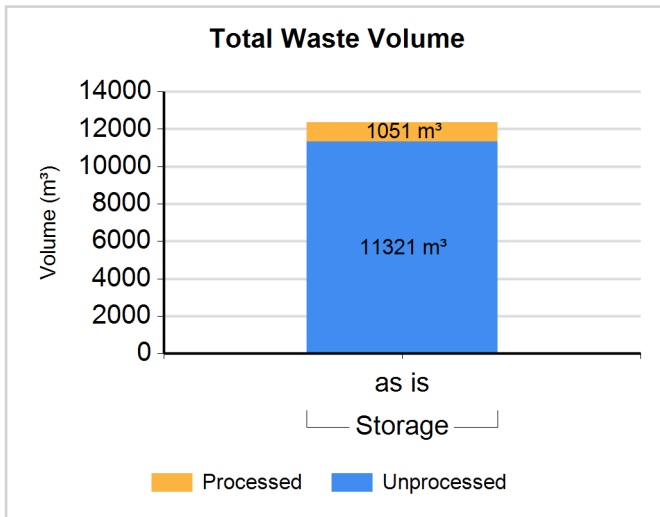
Full Name: Rivne nuclear power plant

Inventory Reporting Date: December 2008

Waste Matrix Used: Ukraine

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.

## Site (Data) : Rivne NPP

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

**Waste Class: Mid-Active**

Waste Class Name	Location / Facility	Proc	Est.	Volume "as is" (m <sup>3</sup> )	Volume "as dispo" (m <sup>3</sup> )	RO %	FF/FE %	RP %	NA %	DF %	DC/RE %	ND %
Mid-Active	Storage	N	N	5543.000	5543.000	100.00	0.00	0.00	0.00	0.00	0.00	0.00
Mid-Active	Storage	Y	N	1051.000	1051.000	100.00	0.00	0.00	0.00	0.00	0.00	0.00

Comment **# 6829: The additional characteristics of the waste**

Unprocessed: explosive, flammable, hazardous (chemical), liquid (aqueous), liquid (organic), resin, sludge, solid (dispersible), solid (non-dispersible), toxic

Processed: liquid (aqueous), liquid (organic)

**Waste Class: Low-Active**

Waste Class Name	Location / Facility	Proc	Est.	Volume "as is" (m <sup>3</sup> )	Volume "as dispo" (m <sup>3</sup> )	RO %	FF/FE %	RP %	NA %	DF %	DC/RE %	ND %
Low-Active	Storage	N	N	5706.000	5706.000	100.00	0.00	0.00	0.00	0.00	0.00	0.00

Comment **# 6830: The additional characteristics of the waste**

Unprocessed: explosive, flammable, hazardous (chemical), liquid (aqueous), liquid (organic), resin, sludge, solid (dispersible), solid (non-dispersible), toxic

**Waste Class: High-Active**

Waste Class Name	Location / Facility	Proc	Est.	Volume "as is" (m <sup>3</sup> )	Volume "as dispo" (m <sup>3</sup> )	RO %	FF/FE %	RP %	NA %	DF %	DC/RE %	ND %
High-Active	Storage	N	N	72.000	72.000	100.00	0.00	0.00	0.00	0.00	0.00	0.00

Comment **# 6831: The additional characteristics of the waste**

Unprocessed: explosive, flammable, hazardous (chemical), liquid (aqueous), liquid (organic), resin, sludge, solid (dispersible), solid (non-dispersible), toxic

**Processing - Conditioning method(s)**

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

## Site (Structure) : SU NPP

Country: UKRAINE

Reporting Year: 2008

Full Name: South-Ukraine nuclear power plant

Location: Uzhnoukrainsk, Ukraine,

Description:

Official Website:

License Holder(s): National nuclear energy generating company

President: Nedashkovskiy Yury

Tel: +38 044 294 48 70

Fax: +38 044 294 48 83

Director: Bilyk Boris

Tel: +38 044 227 26 61

Fax: +38 05136 2 18 32

Waste management facilities that are located at this site:

<b>Facility:</b>	<b>SLRW</b>
<b>Description:</b>	Tanks for liquid radioactive waste

**Storage part of facility****SLRW**

The following shows storage status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	Yes	Yes
Low-Active	Yes	Yes
High-Active	Yes	Yes

List SRS?	No
List UMMT?	No

Capacity:	
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## Types of Storage Units

Storage Unit Name	Type Name	Year Opened	Closed?	Full?	Modular?	Contains SRS?
SLRW1	tank (stainless steel)	1982	No	No	Yes	No
SLRW2	tank (stainless steel)	1986	No	No	Yes	No
SLRW3	tank (stainless steel)	1989	No	No	Yes	No

## Site (Structure) : SU NPP

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>SSRW</b>
<b>Description:</b>	Building for solid radioactive waste storage

**Storage part of facility                      SSRW**

The following shows storage status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	Yes	Yes
Low-Active	Yes	Yes
High-Active	Yes	Yes

<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?
SSRW1	building	1982	No	No	Yes	No
SSRW2	building	1997	No	No	Yes	No
SLLRW	building	1982	No	No	Yes	No
SSRW3	building	2002	No	No	Yes	No

Site (Data) : SU NPP

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

Site Name: SU NPP

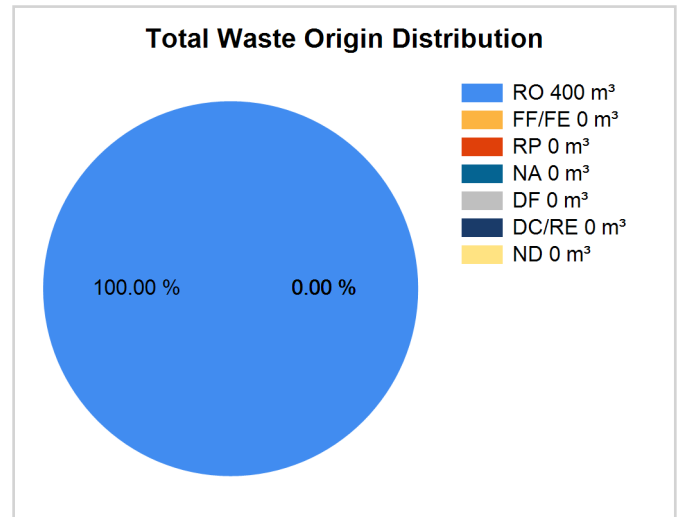
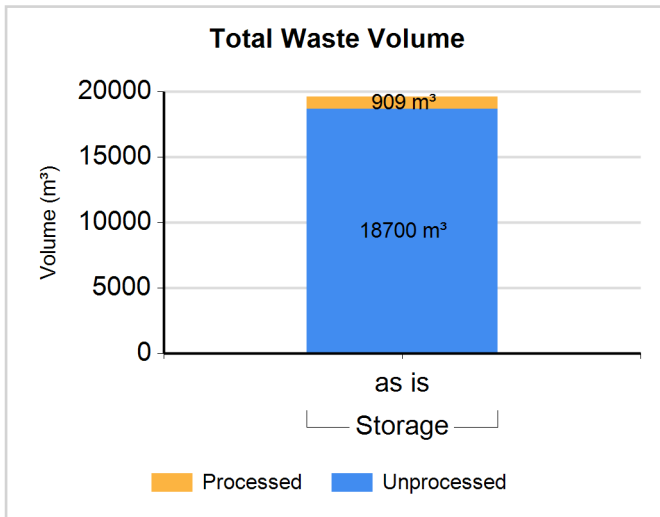
Full Name: South-Ukraine nuclear power plant

Inventory Reporting Date: December 2008

Waste Matrix Used: Ukraine

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.

## Site (Data) : SU NPP

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

**Waste Class: Mid-Active**

Waste Class Name	Location / Facility	Proc	Est.	Volume "as is" (m <sup>3</sup> )	Volume "as dispo" (m <sup>3</sup> )	RO %	FF/FE %	RP %	NA %	DF %	DC/RE %	ND %
Mid-Active	Storage	N	N	3587.000	3587.000	100.00	0.00	0.00	0.00	0.00	0.00	0.00

Comment # 6832: The additional characteristics of the waste

Unprocessed: explosive, flammable, hazardous (chemical), liquid (aqueous), liquid (organic), resin, sludge, solid (dispersible), solid (non-dispersible)

**Waste Class: Low-Active**

Waste Class Name	Location / Facility	Proc	Est.	Volume "as is" (m <sup>3</sup> )	Volume "as dispo" (m <sup>3</sup> )	RO %	FF/FE %	RP %	NA %	DF %	DC/RE %	ND %
Low-Active	Storage	N	N	15099.000	15099.000	100.00	0.00	0.00	0.00	0.00	0.00	0.00
Low-Active	Storage	Y	N	909.000	909.000	100.00	0.00	0.00	0.00	0.00	0.00	0.00

Comment # 6833: The additional characteristics of the waste

Unprocessed: explosive, flammable, hazardous (chemical), liquid (aqueous), liquid (organic), resin, sludge, solid (dispersible), solid (non-dispersible)

**Waste Class: High-Active**

Waste Class Name	Location / Facility	Proc	Est.	Volume "as is" (m <sup>3</sup> )	Volume "as dispo" (m <sup>3</sup> )	RO %	FF/FE %	RP %	NA %	DF %	DC/RE %	ND %
High-Active	Storage	N	N	14.000	14.000	100.00	0.00	0.00	0.00	0.00	0.00	0.00

Comment # 6834: The additional characteristics of the waste

Unprocessed: explosive, flammable, hazardous (chemical), liquid (aqueous), liquid (organic), resin, sludge, solid (dispersible), solid (non-dispersible)



## Site (Structure) : Zap NPP

Country: UKRAINE

Reporting Year: 2008

Full Name: Zaporizhzhya Nuclear Power Plant

Location: Energodar, Ukraine, 71500

Description:

Official Website:

License Holder(s): National nuclear energy generating company

President: Nedashkovskiy Yury

Tel: +38 044 294 48 70

Fax: +38 044 294 48 83

Director: Tischenko Vyacheslav

Tel.: +38 06139 3 38 78

Fax: +38 06139 3 19 12

Waste management facilities that are located at this site:

<b>Facility:</b>	<b>IF</b>		
<b>Description:</b>	Incineration facility		
<b>Processing part of facility</b> <b>IF</b>			
The following shows processing status for waste classes and SRS.			
<b>Waste Class</b>	<b>Actual</b>	<b>Planned</b>	
Mid-Active	No	No	
Low-Active	No	No	
High-Active	No	No	
<b>Type:</b>	Treatment		
<b>Year opened:</b>	1990		

## Site (Structure) : Zap NPP

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>PF</b>												
Description:	Pressing facility												
<b>Processing part of facility                      PF</b>													
The following shows processing status for waste classes and SRS.													
<table border="1"><thead><tr><th>Waste Class</th><th>Actual</th><th>Planned</th></tr></thead><tbody><tr><td>Mid-Active</td><td>No</td><td>No</td></tr><tr><td>Low-Active</td><td>No</td><td>No</td></tr><tr><td>High-Active</td><td>No</td><td>No</td></tr></tbody></table>	Waste Class	Actual	Planned	Mid-Active	No	No	Low-Active	No	No	High-Active	No	No	
Waste Class	Actual	Planned											
Mid-Active	No	No											
Low-Active	No	No											
High-Active	No	No											
Type:	Treatment												
Year opened:	1991												

## Site (Structure) : Zap NPP

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>SLRW</b>
<b>Description:</b>	Tanks for liquid radioactive waste

**Storage part of facility                      SLRW**

The following shows storage status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	Yes	Yes
Low-Active	Yes	Yes
High-Active	No	No

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

<b>Capacity:</b>	
------------------	--

## Types of Storage Units

Storage Unit Name	Type Name	Year Opened	Closed?	Full?	Modular?	Contains SRS?
SLRW1	tank (stainless steel)	1984	No	No	Yes	No
SLRW2	tank (stainless steel)	1989	No	No	Yes	No

## Site (Structure) : Zap NPP

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>SSRW</b>
<b>Description:</b>	Building for solid radioactive waste storage

**Storage part of facility                      SSRW**

The following shows storage status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	Yes	Yes
Low-Active	Yes	Yes
High-Active	Yes	Yes

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

<b>Capacity:</b>	
------------------	--

## Types of Storage Units

Storage Unit Name	Type Name	Year Opened	Closed?	Full?	Modular?	Contains SRS?
SSRW1	building	1984	No	No	Yes	No
SSRW2	building	1989	No	No	Yes	No
SSRW3	building	1986	No	No	No	No

Site (Data) : Zap NPP

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

Site Name: Zap NPP

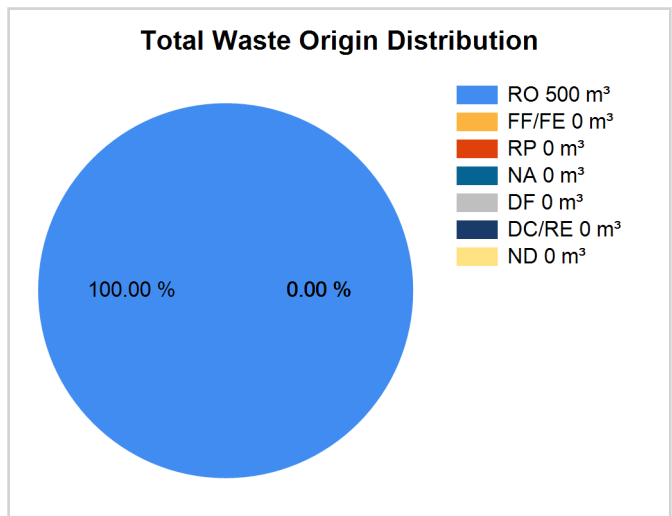
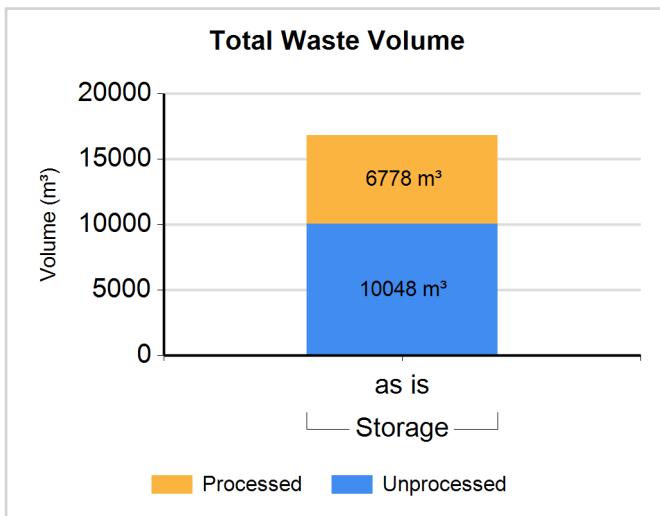
Full Name: Zaporizhzhya Nuclear Power Plant

Inventory Reporting Date: December 2008

Waste Matrix Used: Ukraine

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.

## Site (Data) : Zap NPP

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

**Waste Class: Mid-Active**

Waste Class Name	Location / Facility	Proc	Est.	Volume "as is" (m <sup>3</sup> )	Volume "as dispo" (m <sup>3</sup> )	RO %	FF/FE %	RP %	NA %	DF %	DC/RE %	ND %
Mid-Active	Storage	N	N	3313.000	3313.000	100.00	0.00	0.00	0.00	0.00	0.00	0.00
Mid-Active	Storage	Y	N	5332.000	5332.000	100.00	0.00	0.00	0.00	0.00	0.00	0.00

Comment # 6823: The additional characteristics of the waste

Unprocessed: explosive, flammable, hazardous (chemical), liquid (aqueous), liquid (organic), resin, sludge, solid (dispersible), solid (non-dispersible)

Processed: flammable, liquid (aqueous), liquid (organic)

**Waste Class: Low-Active**

Waste Class Name	Location / Facility	Proc	Est.	Volume "as is" (m <sup>3</sup> )	Volume "as dispo" (m <sup>3</sup> )	RO %	FF/FE %	RP %	NA %	DF %	DC/RE %	ND %
Low-Active	Storage	N	N	6648.000	6648.000	100.00	0.00	0.00	0.00	0.00	0.00	0.00
Low-Active	Storage	Y	N	1446.000	1446.000	100.00	0.00	0.00	0.00	0.00	0.00	0.00

Comment # 6824: The additional characteristics of the waste

Unprocessed: explosive, flammable, hazardous (chemical), liquid (aqueous), liquid (organic), resin, sludge, solid (dispersible), solid (non-dispersible)

Processed: flammable, liquid (aqueous), liquid (organic)

**Waste Class: High-Active**

Waste Class Name	Location / Facility	Proc	Est.	Volume "as is" (m <sup>3</sup> )	Volume "as dispo" (m <sup>3</sup> )	RO %	FF/FE %	RP %	NA %	DF %	DC/RE %	ND %
High-Active	Storage	N	N	87.000	87.000	100.00	0.00	0.00	0.00	0.00	0.00	0.00

Comment # 6825: The additional characteristics of the waste

Unprocessed: explosive, flammable, hazardous (chemical), liquid (aqueous), liquid (organic), resin, sludge, solid (dispersible), solid (non-dispersible)

**Processing - Treatment method(s)**

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

## Site (Structure) : Dnibr SE

Country: UKRAINE

Reporting Year: 2008

Full Name: Dnipropetrovsk State Interregion Special Enterprise

Location: 24Á, Stalingrad herois str., Dnipropetrovsk, Ukraine, 49061

Description:

Official Website:

License Holder(s): Dnipropetrovsk State Interregional Special Enterprise,  
Director: Svidersky Viktor,  
Phone: +38 056 231 31 23  
Fax: +38 056 2312182

Waste management facilities that are located at this site:

<b>Facility:</b>	<b>Module 2</b>
<b>Description:</b>	Concrete modules for solid radioactive waste

## Site (Structure) : Dnibr SE

Country: UKRAINE

Reporting Year: 2008

**Disposal part of facility****Module 2**

The following shows disposal status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	Yes	No
Low-Active	No	No
High-Active	No	No

List SRS?	No
List UMMT?	No

Type:	engineered near surface		
Facility is modular?	No		
Capacity existing (m3):	200	Capacity planned (m3):	200

Depth (m):	6	Host medium:	sedimentary rock (consolidated clay)
------------	---	--------------	---

Phase Name	Start Year	End Year	Estimate
operation	1983		False
EVENT: operating license granted	1995	1998	False
EVENT: operating license granted	1998	2001	False
EVENT: operating license granted	2001	2004	False
EVENT: operating license granted	2005	2008	False
EVENT: operating license granted	2008	2011	False



## Site (Structure) : Dnipro SE

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>Module 4</b>
<b>Description:</b>	Storage for liquid radioactive waste

**Storage part of facility                      Module 4**

The following shows storage status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	Yes	No
Low-Active	No	No
High-Active	No	No

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

<b>Capacity:</b>	200m3
------------------	-------

## Types of Storage Units

Storage Unit Name	Type Name	Year Opened	Closed?	Full?	Modular?	Contains SRS?
Modul 4	cask	1961	No	No	No	No

## Site (Structure) : Dnpr SE

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>Module 5</b>
<b>Description:</b>	Concrete module for solid biological radioactive waste

**Disposal part of facility                      Module 5**

The following shows disposal status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	Yes	No
Low-Active	No	No
High-Active	No	No

List SRS?	No
List UMMT?	No

Type:	engineered near surface		
Facility is modular?	No		
Capacity existing (m3):	50	Capacity planned (m3):	50

Depth (m):	6	Host medium:	sedimentary rock (consolidated clay)
------------	---	--------------	---

Phase Name	Start Year	End Year	Estimate
operation	1983		False
EVENT: operating license granted	1995	1998	False
EVENT: operating license granted	1998	2001	False
EVENT: operating license granted	2001	2004	False
EVENT: operating license granted	2005	2008	False
EVENT: operating license granted	2008	2011	False

## Site (Structure) : Dnpr SE

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>Module1</b>
Description:	Concrete modules for solid radioactive waste

**Disposal part of facility                      Module1**

The following shows disposal status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	Yes	No
Low-Active	No	No
High-Active	No	No

List SRS?	No
List UMMT?	No

Type:	engineered near surface		
Facility is modular?	No		
Capacity existing (m3):	200	Capacity planned (m3):	200

Depth (m):	6	Host medium:	sedimentary rock (consolidated clay)
------------	---	--------------	---

Phase Name	Start Year	End Year	Estimate
operation	1962		False
EVENT: operating license granted	1995	1998	False
EVENT: operating license granted	1998	2001	False
EVENT: operating license granted	2001	2004	False
EVENT: operating license granted	2005	2008	False
EVENT: operating license granted	2008	2011	False
EVENT: operation suspended	1981		False

## Site (Structure) : Dnpr SE

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>SRS 1</b>
<b>Description:</b>	Module for Spent Radioactive Sources

**Disposal part of facility SRS 1**

The following shows disposal status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	No	No
Low-Active	No	No
High-Active	No	No

List SRS?	Yes
List UMMT?	No

Type:	engineered near surface		
Facility is modular?	No		
Capacity existing (m3):	1	Capacity planned (m3):	1

Depth (m):	6	Host medium:	sedimentary rock (consolidated clay)
------------	---	--------------	---

Phase Name	Start Year	End Year	Estimate
operation	1962		False
EVENT: operating license granted	1995	1998	False
EVENT: operating license granted	1998	2001	False
EVENT: operating license granted	2001	2004	False
EVENT: operating license granted	2005	2008	False
EVENT: operating license granted	2008	2011	False

Site (Data) : Dnibr SE

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

Site Name: Dnibr SE

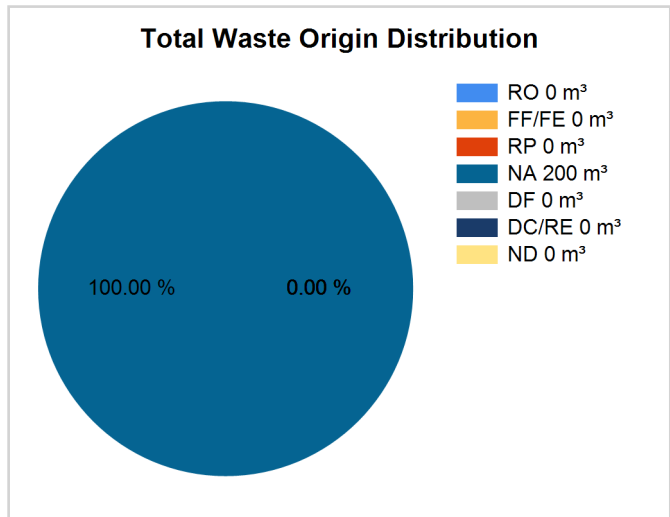
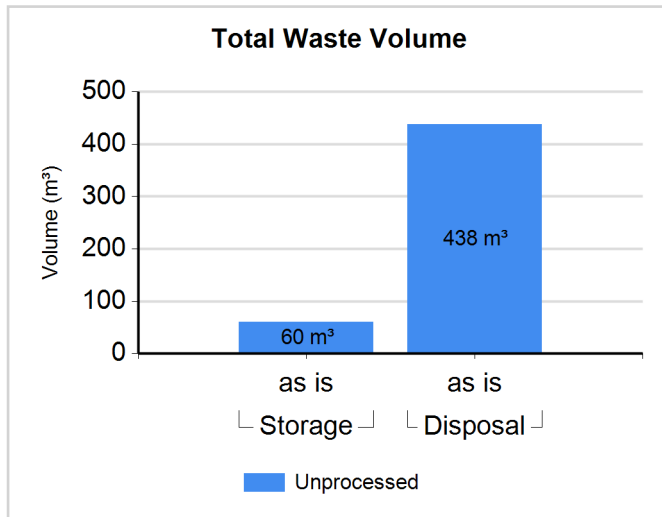
Full Name: Dnipropetrovsk State Interregion Special Enterprise

Inventory Reporting Date: December 2008

Waste Matrix Used: Ukraine

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: Mid-Active

Waste Class Name	Location / Facility	Proc	Est.	Volume "as is" (m³)	Volume "as dispo" (m³)	RO %	FF/FE %	RP %	NA %	DF %	DC/RE %	ND %
Mid-Active	Storage	N	N	60.000	60.000	0.00	0.00	0.00	100.00	0.00	0.00	0.00
Mid-Active	Disposal	N	N	438.000	438.000	0.00	0.00	0.00	100.00	0.00	0.00	0.00

Comment # 6803: The additional characteristics of the waste

Unprocessed: liquid (aqueous)

Spent Sources <=30 years in Disposition

Nuclide	Number of Sources/Total Activity of Sources (GBq)			c	o	n	d	c	u	n	c	o	n	d	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	9			N	Y	Y	Y	3.400E+000								
	3.400E+000															
Cd-109	2			N	Y	Y	Y	2.100E-004								
	2.100E-004															

## Site (Data) : Dnibr SE

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

Ce-139	10			N	Y	Y	1.300E-003	
	1.300E-003							
Cf-252		2		N	Y	Y	2.400E+004	
		2.400E+004						
Co-57	41	2		N	Y	Y	1.690E+001	
	5.900E+000	1.100E+001						
Co-57	10			N	Y	Y	8.400E-003	
	8.400E-003							
Co-60	39			N	Y	Y	1.100E+001	
	1.100E+001							
Co-60	204			N	Y	Y	3.200E+000	
	3.200E+000							
Co-60	1239	19		N	Y	Y	7.302E+004	
	1.700E+001	7.300E+004						
Co-60		695		N	Y	Y	4.600E+004	
		4.600E+004						
Co-60	20			N	Y	Y	4.300E-004	
	4.300E-004							
Co-60	184			N	Y	Y	9.900E+000	
	9.900E+000							
Co-60	207			N	Y	Y	4.400E+000	
	4.400E+000							
Cs-137	73	110		N	Y	Y	5.940E+003	
	1.400E+002	5.800E+003						
Cs-137	26	52		N	Y	Y	2.375E+003	
	7.500E+001	2.300E+003						
Cs-137		4993		N	Y	Y	2.800E+005	
		2.800E+005						
Cs-137	510	1055		N	Y	Y	7.045E+004	
	4.500E+002	7.000E+004						

## Site (Data) : Dnibr SE

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

Cs-137	122	143		N	Y	Y	9.202E+003	
	1.900E+000	9.200E+003						
Cs-137	97			N	Y	Y	7.000E+001	
	7.000E+001							
Cs-137		119		N	Y	Y	7.500E+003	
		7.500E+003						
Fe-55	2			N	Y	Y	1.200E-002	
	1.200E-002							
Fe-55	6			N	Y	Y	1.000E+001	
	1.000E+001							
Fe-55	4			N	Y	Y	3.300E-001	
	3.300E-001							
H-3	169			N	Y	Y	3.400E+002	
	3.400E+002							
H-3	1118			N	Y	Y	2.300E+003	
	2.300E+003							
H-3	1			N	Y	Y	1.000E-001	
	1.000E-001							
Hg-203	1			N	Y	Y	9.800E-006	
	9.800E-006							
Hg-203	14			N	Y	Y	5.000E+000	
	5.000E+000							
Ir-192		122		N	Y	Y	7.000E+003	
		7.000E+003						
Ir-192		8		N	Y	Y	1.700E+004	
		1.700E+004						
Ir-192	1			N	Y	Y	2.800E-003	
	2.800E-003							
Ir-192	6			N	Y	Y	5.500E+000	
	5.500E+000							

## Site (Data) : Dnibr SE

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

Ir-192	3			N	Y	Y	1.100E-001	
	1.100E-001							
Kr-85		2		N	Y	Y	9.800E+000	
		9.800E+000						
Mn-54	9			N	Y	Y	1.100E-003	
	1.100E-003							
Mn-54	1			N	Y	Y	4.700E-004	
	4.700E-004							
Na-22	1			N	Y	Y	6.000E-005	
	6.000E-005							
Na-22	7			N	Y	Y	6.700E-004	
	6.700E-004							
Na-22	1			N	Y	Y	3.600E-009	
	3.600E-009							
P-32	13			N	Y	Y	1.200E+001	
	1.200E+001							
P-32	12			N	Y	Y	2.600E-001	
	2.600E-001							
Pm-147	306	3		N	Y	Y	1.602E+003	
	1.500E+000	1.600E+003						
Pm-147		310		N	Y	Y	1.900E+003	
		1.900E+003						
Pm-147	44	2		N	Y	Y	5.203E+001	
	3.000E-002	5.200E+001						
Pm-147	25			N	Y	Y	1.000E-002	
	1.000E-002							
Se-75	2			N	Y	Y	3.500E+000	
	3.500E+000							
Se-75	2			N	Y	Y	1.400E-002	
	1.400E-002							



## Site (Data) : Dnibr SE

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

Se-75	1			N	Y	Y	5.300E-003	
	5.300E-003							
Sn-113	10			N	Y	Y	1.400E-003	
	1.400E-003							
Sn-113	1			N	Y	Y	1.800E-005	
	1.800E-005							
Sr-90	85			N	Y	Y	5.800E+000	
	5.800E+000							
Sr-90	559			N	Y	Y	1.100E+003	
	1.100E+003							
Sr-90	8352			N	Y	Y	4.400E+001	
	4.400E+001							
Th-228	1			N	Y	Y	7.400E-001	
	7.400E-001							
TI-204	48			N	Y	Y	3.000E+000	
	3.000E+000							
TI-204	53			N	Y	Y	7.800E+000	
	7.800E+000							
Y-88	12			N	Y	Y	1.400E-003	
	1.400E-003							
Y-88	1			N	Y	Y	1.100E-005	
	1.100E-005							
Zn-65	3			N	Y	Y	5.200E-005	
	5.200E-005							
Zn-65	8			N	Y	Y	9.200E-004	
	9.200E-004							

**Spent Sources > 30 years in Disposition**

Number of Sources/Total Activity of Sources (GBq)	
Group I less than or equal 2 GBq	Group II more than 2GBq

## Site (Data) : Dnibr SE

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

Nuclide	num/activity	num/activity	c	u	c	Total Activity for	Decay Date
Am-241	262		N	Y	Y	4.200E-001	
	4.200E-001						
Am-241		6	N	Y	Y	2.100E+001	
		2.100E+001					
Am-241		199	N	Y	Y	1.500E+003	
		1.500E+003					
Am-241	1		N	Y	Y	2.100E-005	
	2.100E-005						
Am-241		13	N	Y	Y	2.600E+003	
		2.600E+003					
Am-241	690		N	Y	Y	4.500E+002	
	4.500E+002						
Am-241		52	N	Y	Y	6.700E+002	
		6.700E+002					
C-14	125		N	Y	Y	1.800E-002	
	1.800E-002						
Ni-63	82		N	Y	Y	7.400E-003	
	7.400E-003						
Ni-63	2		N	Y	Y	2.100E+000	
	2.100E+000						
Ni-63	51		N	Y	Y	1.500E+000	
	1.500E+000						
Ni-63	8		N	Y	Y	3.000E-002	
	3.000E-002						
Pu-238	1		N	Y	Y	3.600E-007	
	3.600E-007						
Pu-238	6		N	Y	Y	1.200E+001	
	1.200E+001						

## Site (Data) : Dnibr SE

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

Pu-238		2	N	Y	Y	7.400E+001	
		7.400E+001					
Pu-238	1		N	Y	Y	1.100E+000	
	1.100E+000						
Pu-238	14		N	Y	Y	3.600E+000	
	3.600E+000						
Pu-239	20872	196	N	Y	Y	1.710E+003	
	9.800E+000	1.700E+003					
Pu-239	5708		N	Y	Y	1.900E+001	
	1.900E+001						
Pu-239	26848		N	Y	Y	3.500E+003	
	3.500E+003						
Pu-239	1700		N	Y	Y	5.400E+001	
	5.400E+001						
Ra-226	4		N	Y	Y	4.800E-002	
	4.800E-002						
Ra-226	52		N	Y	Y	1.700E+000	
	1.700E+000						
Ra-226	6		N	Y	Y	1.800E+000	
	1.800E+000						
Ra-226		1	N	Y	Y	3.100E+000	
		3.100E+000					
Ra-226	32		N	Y	Y	1.100E+000	
	1.100E+000						
Th-232	1		N	Y	Y	9.000E-001	
	9.000E-001						
U-233	1		N	Y	Y	8.400E-006	
	8.400E-006						
U-234	5		N	Y	Y	8.300E-007	
	8.300E-007						

## Site (Data) : Dnibr SE

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

U-235	1		N	Y	Y	1.000E-003	
	1.000E-003						
U-238	7		N	Y	Y	1.600E-005	
	1.600E-005						

## Site (Data) : Dnibr SE

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

**Multiple Nuclides SRS in Disposition**

Nuclide	Activity of Sources (GBq)	cond	uncond	cat	Decay Date
Pu-238	9.500E-006	N	Y	N	
Pu-239	9.500E-006	N	Y	N	
U-233	1.900E-005	N	Y	Y	
Pu-238	1.000E-005	N	Y	N	
Pu-239	1.000E-005	N	Y	N	
U-233	2.000E-005	N	Y	Y	
Pu-238	1.000E-005	N	Y	N	
Pu-239	1.000E-005	N	Y	N	
U-233	2.000E-005	N	Y	Y	
Pu-238	9.450E-006	N	Y	N	
Pu-239	9.450E-006	N	Y	N	
U-233	1.890E-005	N	Y	Y	
Pu-238	9.400E-006	N	Y	N	
Pu-239	9.400E-006	N	Y	N	
U-233	1.880E-005	N	Y	Y	
Pu-238	9.000E-006	N	Y	N	
Pu-239	9.000E-006	N	Y	N	
U-233	1.800E-005	N	Y	Y	
Pu-238	1.035E-005	N	Y	N	
Pu-239	1.035E-005	N	Y	N	
U-233	2.075E-005	N	Y	Y	
Pu-238	1.090E-005	N	Y	Y	
Pu-239	1.090E-005	N	Y	Y	
U-233	2.180E-005	N	Y	Y	

## Site (Structure) : Kh SE

Country: UKRAINE

Reporting Year: 2008

Full Name: Kharkov State Interregional Special Enterprise

Location: 1, Sokolova str., Kharkov, Ukraine, 61115

Description:

Official Website:

License Holder(s): Kharkov State Interregional Special Enterprise  
 Director: Sharov Volodymyr  
 Fax: +38 057 717 46 85  
 Phone: +38 057 293 41 59

Waste management facilities that are located at this site:

<b>Facility:</b>	<b>FAC 1</b>		
<b>Description:</b>	Facility for liquid radioactive waste cementation		
<b>Processing part of facility                      FAC 1</b>			
The following shows processing status for waste classes and SRS.			
<b>Waste Class</b>	<b>Actual</b>	<b>Planned</b>	
Mid-Active	No	No	
Low-Active	No	No	
High-Active	No	No	
<b>Type:</b>	Conditioning		
<b>Year opened:</b>	1993		

## Site (Structure) : Kh SE

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>FAC 2</b>												
Description:	Facility for liquid radioactive waste cementation												
<b>Processing part of facility                      FAC 2</b>													
The following shows processing status for waste classes and SRS.													
<table border="1"><thead><tr><th>Waste Class</th><th>Actual</th><th>Planned</th></tr></thead><tbody><tr><td>Mid-Active</td><td>No</td><td>No</td></tr><tr><td>Low-Active</td><td>No</td><td>No</td></tr><tr><td>High-Active</td><td>No</td><td>No</td></tr></tbody></table>	Waste Class	Actual	Planned	Mid-Active	No	No	Low-Active	No	No	High-Active	No	No	
Waste Class	Actual	Planned											
Mid-Active	No	No											
Low-Active	No	No											
High-Active	No	No											
Type:	Conditioning												
Year opened:	1995												

## Site (Structure) : Kh SE

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>Module 1</b>
<b>Description:</b>	Concrete modules 1-14 for solid radioactive waste

**Disposal part of facility                      Module 1**

The following shows disposal status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	Yes	No
Low-Active	No	No
High-Active	No	No

List SRS?	No
List UMMT?	No

Type:	engineered near surface		
Facility is modular?	Yes		
Capacity existing (m3):	1525	Capacity planned (m3):	1525

Depth (m):	3	Host medium:	sedimentary (other)
------------	---	--------------	---------------------

Phase Name	Start Year	End Year	Estimate
operation	1990		False
EVENT: operating license granted	1995	1998	False
EVENT: operating license granted	1998	2003	False
EVENT: operating license granted	2003	2008	False
EVENT: operating license granted	2008	2011	False



## Site (Structure) : Kh SE

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>Module 18</b>
<b>Description:</b>	Concrete module for biological radioactive waste

**Disposal part of facility                      Module 18**

The following shows disposal status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	Yes	No
Low-Active	No	No
High-Active	No	No

List SRS?	No
List UMMT?	No

Type:	engineered near surface		
Facility is modular?	No		
Capacity existing (m3):	60	Capacity planned (m3):	60

Depth (m):	3	Host medium:	sedimentary (other)
------------	---	--------------	---------------------

Phase Name	Start Year	End Year	Estimate
operation	1968		False
EVENT: operating license granted	1995	1998	False
EVENT: operating license granted	1998	2003	False
EVENT: operating license granted	2003	2008	False
EVENT: operating license granted	2008	2011	False
EVENT: operation suspended	1991		False

## Site (Structure) : Kh SE

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>Module 19</b>
<b>Description:</b>	Concrete modules for solid radioactive waste

**Disposal part of facility                      Module 19**

The following shows disposal status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	Yes	No
Low-Active	No	No
High-Active	No	No

List SRS?	No
List UMMT?	No

Type:	engineered near surface		
Facility is modular?	No		
Capacity existing (m3):	400	Capacity planned (m3):	400

Depth (m):	3	Host medium:	sedimentary (other)
------------	---	--------------	---------------------

Phase Name	Start Year	End Year	Estimate
operation	1962		False
EVENT: operating license granted	1995	1998	False
EVENT: operating license granted	1998	2003	False
EVENT: operating license granted	2003	2008	False
EVENT: operating license granted	2008	2011	False
EVENT: operation suspended	1996		False

## Site (Structure) : Kh SE

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>Module 20</b>
<b>Description:</b>	Concrete modules for solid radioactive waste

**Disposal part of facility                      Module 20**

The following shows disposal status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	Yes	No
Low-Active	No	No
High-Active	No	No

List SRS?	No
List UMMT?	No

Type:	engineered near surface		
Facility is modular?	No		
Capacity existing (m3):	400	Capacity planned (m3):	400

Depth (m):	3	Host medium:	sedimentary (other)
------------	---	--------------	---------------------

Phase Name	Start Year	End Year	Estimate
operation	1968		False
ACTIVITY: upgrading	1997	1998	False
EVENT: operating license granted	1995	1998	False
EVENT: operating license granted	1998	2003	False
EVENT: operating license granted	2003	2008	False
EVENT: operating license granted	2008	2011	False
EVENT: operation suspended	1991		False

## Site (Structure) : Kh SE

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>Module 21</b>
<b>Description:</b>	Cask for liquid radioactive waste

**Storage part of facility                      Module 21**

The following shows storage status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	Yes	No
Low-Active	No	No
High-Active	No	No

List SRS?	No
List UMMT?	No

Capacity:	1200 m3
-----------	---------

## Types of Storage Units

Storage Unit Name	Type Name	Year Opened	Closed?	Full?	Modular?	Contains SRS?
Modul 21	cask	1961	No	No	No	No

## Site (Structure) : Kh SE

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>PIPE</b>					
<b>Description:</b>	Storage for radioactive contaminated pipes					
<b>Storage part of facility</b>						
<b>PIPE</b>						
The following shows storage status for waste classes and SRS.						
<b>Waste Class</b>	<b>Actual</b>	<b>Planned</b>				
Mid-Active	Yes	No				
Low-Active	No	No				
High-Active	No	No				
<b>List SRS?</b>	No					
<b>List UMMT?</b>	No					
<b>Capacity:</b>	702m3					
<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>
PIPE	building	1997	No	Yes	No	No

## Site (Structure) : Kh SE

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>SRS 15-16</b>
<b>Description:</b>	Two Modules for Spent Radioactive Sources are operating

**Disposal part of facility SRS 15-16**

The following shows disposal status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	No	No
Low-Active	No	No
High-Active	No	No

List SRS?	Yes
List UMMT?	No

Type:	engineered near surface		
Facility is modular?	No		
Capacity existing (m3):	1	Capacity planned (m3):	1

Depth (m):	6	Host medium:	sedimentary rock (consolidated clay)
------------	---	--------------	---

Phase Name	Start Year	End Year	Estimate
operation	1990		False
EVENT: operating license granted	1995	1998	False
EVENT: operating license granted	1998	2003	False
EVENT: operating license granted	2003	2008	False
EVENT: operating license granted	2008	2011	False

## Site (Structure) : Kh SE

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>SRS 17</b>
<b>Description:</b>	Module for Spent Radioactive Sources are not operating

**Disposal part of facility SRS 17**

The following shows disposal status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	No	No
Low-Active	No	No
High-Active	No	No

List SRS?	Yes
List UMMT?	No

Type:	engineered near surface		
Facility is modular?	No		
Capacity existing (m3):	1	Capacity planned (m3):	1

Depth (m):	6	Host medium:	sedimentary (other)
------------	---	--------------	---------------------

Phase Name	Start Year	End Year	Estimate
operation	1961		False
EVENT: operating license granted	1995	1998	False
EVENT: operating license granted	1998	2003	False
EVENT: operating license granted	2003	2008	False
EVENT: operating license granted	2008	2011	False
EVENT: operation suspended	1991		False

## Site (Data) : Kh SE

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

Site Name: Kh SE

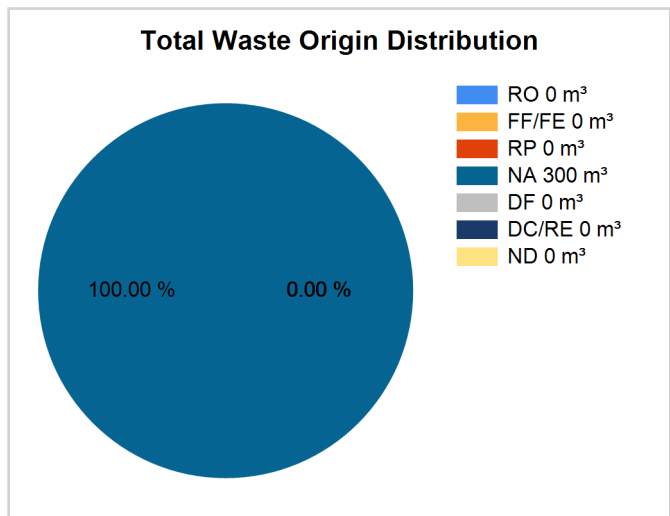
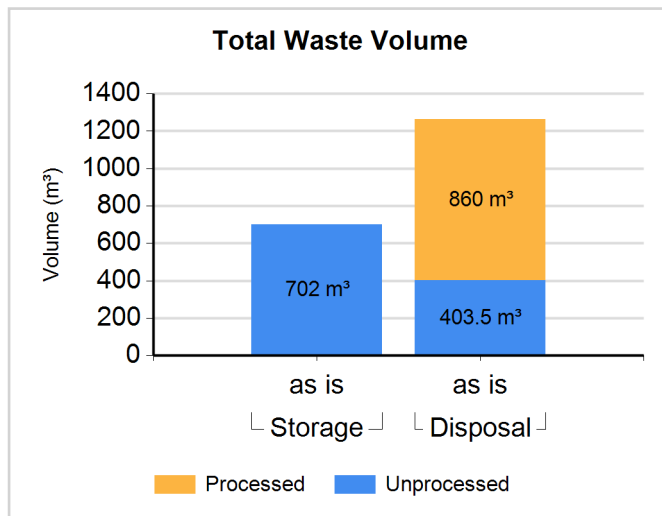
Full Name: Kharkov State Interregional Special Enterprise

Inventory Reporting Date: December 2008

Waste Matrix Used: Ukraine

## 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: Mid-Active

Waste Class Name	Location / Facility	Proc	Est.	Volume "as is" (m³)	Volume "as dispo" (m³)	RO %	FF/FE %	RP %	NA %	DF %	DC/RE %	ND %
Mid-Active	Storage	N	N	702.000	702.000	0.00	0.00	0.00	100.00	0.00	0.00	0.00
Mid-Active	Disposal	N	N	403.500	403.500	0.00	0.00	0.00	100.00	0.00	0.00	0.00
Mid-Active	Disposal	Y	N	860.000	860.000	0.00	0.00	0.00	100.00	0.00	0.00	0.00

Comment # 6808: The additional characteristics of the waste

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

Processed: solid (non-dispersible)

## 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

## Spent Sources &lt;=30 years in Disposition

Number of Sources/Total Activity of Sources (GBq)		
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



## Site (Data) : Kh SE

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

Nuclide	num/activity	num/activity	num/activity	c	u	c	Total Activity for	Decay Date
Cd-109	22			N	Y	Y	3.800E-002	
	3.800E-002							
Ce-139	1			N	Y	Y	1.000E-004	
	1.000E-004							
Cf-252	16	1		N	Y	Y	1.701E+001	
	5.300E-003	1.700E+001						
Cf-252	1			N	Y	Y	8.200E-006	
	8.200E-006							
Co-56	25			N	Y	Y	1.000E-007	
	1.000E-007							
Co-56	17			N	Y	Y	2.000E-004	
	2.000E-004							
Co-56	1			N	Y	Y	1.000E-004	
	1.000E-004							
Co-57	2			N	Y	Y	1.000E-004	
	1.000E-004							
Co-57	1			N	Y	Y	1.200E-005	
	1.200E-005							
Co-57	26			N	Y	Y	1.900E-004	
	1.900E-004							
Co-58	31			N	Y	Y	1.000E-007	
	1.000E-007							
Co-60	424	3		N	Y	Y	1.164E+002	
	6.400E+000	1.100E+002						
Co-60	1091	64		N	Y	Y	2.830E+002	
	2.300E+001	2.600E+002						
Co-60	31	50		N	Y	Y	3.070E+002	
	1.700E+001	2.900E+002						

## Site (Data) : Kh SE

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

Co-60	1			N	Y	Y	2.600E-003	
	2.600E-003							
Co-60	3			N	Y	Y	5.700E+000	
	5.700E+000							
Co-60	75			N	Y	Y	1.800E-002	
	1.800E-002							
Co-60	1			N	Y	Y	1.700E-002	
	1.700E-002							
Co-60	2			N	Y	Y	4.200E+000	
	4.200E+000							
Co-60		2		N	Y	Y	4.700E+001	
		4.700E+001						
Co-60		29		N	Y	Y	3.100E+002	
		3.100E+002						
Cs-137	703			N	Y	Y	8.700E+001	
	8.700E+001							
Cs-137	75			N	Y	Y	1.000E+002	
	1.000E+002							
Cs-137		318		N	Y	Y	1.000E+004	
		1.000E+004						
Cs-137	78			N	Y	Y	2.000E+001	
	2.000E+001							
Cs-137		111		N	Y	Y	5.900E+003	
		5.900E+003						
Cs-137	92	179		N	Y	Y	1.101E+004	
	1.400E+001	1.100E+004						
Cs-137	2			N	Y	Y	6.700E-005	
	6.700E-005							
Cs-137	568	1493		N	Y	Y	7.827E+004	
	2.700E+002	7.800E+004						

## Site (Data) : Kh SE

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

Cs-137	261	376		N	Y	Y	2.413E+004	
	1.300E+002	2.400E+004						
Eu-152		1		N	Y	Y	2.300E+001	
		2.300E+001						
Fe-55	15			N	Y	Y	2.000E+000	
	2.000E+000							
Fe-55	2			N	Y	Y	3.400E-003	
	3.400E-003							
Fe-55	2			N	Y	Y	2.300E-002	
	2.300E-002							
Fe-59	8			N	Y	Y	1.000E-007	
	1.000E-007							
H-3	43			N	Y	Y	9.800E-002	
	9.800E-002							
H-3	376			N	Y	Y	1.800E+002	
	1.800E+002							
H-3		38		N	Y	Y	3.100E+004	
		3.100E+004						
Hg-203	5			N	Y	Y	1.000E+000	
	1.000E+000							
I-125	2			N	Y	Y	2.600E-006	
	2.600E-006							
I-131	1			N	Y	Y	1.000E+000	
	1.000E+000							
Ir-192	12			N	Y	Y	8.800E-002	
	8.800E-002							
Ir-192	221			N	Y	Y	4.400E-001	
	4.400E-001							
Ir-192	3			N	Y	Y	8.800E+000	
	8.800E+000							

## Site (Data) : Kh SE

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

Ir-192	1			N	Y	Y	2.300E+000	
	2.300E+000							
Kr-85	1			N	Y	Y	2.300E+000	
	2.300E+000							
Mn-54	13			N	Y	Y	2.700E-007	
	2.700E-007							
Mn-54	5			N	Y	Y	2.900E-008	
	2.900E-008							
Na-22	3			N	Y	Y	5.400E-006	
	5.400E-006							
Na-22	14			N	Y	Y	5.300E-005	
	5.300E-005							
Na-22	1			N	Y	Y	1.000E-004	
	1.000E-004							
Pm-147	21			N	Y	Y	1.000E-004	
	1.000E-004							
Pm-147	42	10		N	Y	Y	3.602E+002	
	1.800E-001	3.600E+002						
Pm-147	10			N	Y	Y	1.300E-006	
	1.300E-006							
Po-210	130			N	Y	Y	3.800E-002	
	3.800E-002							
Ru-106	1			N	Y	Y	8.000E-005	
	8.000E-005							
Sn-113	24			N	Y	Y	2.800E-008	
	2.800E-008							
Sn-119m	3			N	Y	Y	8.100E-005	
	8.100E-005							
Sn-119m	1			N	Y	Y	1.500E-006	
	1.500E-006							

## Site (Data) : Kh SE

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

Sr-90	6456	3		N	Y	Y	2.090E+002	
	1.300E+002	7.900E+001						
Sr-90	1837			N	Y	Y	3.000E+002	
	3.000E+002							
Sr-90		20		N	Y	Y	1.600E+002	
		1.600E+002						
Sr-90	100			N	Y	Y	2.500E+001	
	2.500E+001							
Sr-90	18			N	Y	Y	3.500E-004	
	3.500E-004							
Sr-90	165			N	Y	Y	5.300E+001	
	5.300E+001							
Sr-90		1		N	Y	Y	3.200E+001	
		3.200E+001						
TI-204	9			N	Y	Y	3.100E+000	
	3.100E+000							
TI-204	4			N	Y	Y	2.100E+000	
	2.100E+000							
TI-204	1			N	Y	Y	4.600E-009	
	4.600E-009							
Tm-170	2			N	Y	Y	1.000E-007	
	1.000E-007							
Tm-170	21			N	Y	Y	4.000E-002	
	4.000E-002							
Tm-170	1			N	Y	Y	6.100E-006	
	6.100E-006							
Tm-170	1			N	Y	Y	1.000E-004	
	1.000E-004							
Zn-65	79			N	Y	Y	1.400E-003	
	1.400E-003							

## Site (Data) : Kh SE

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

**Spent Sources > 30 years in Disposition**

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	160		N	Y	Y	9.800E+001	
	9.800E+001						
Am-241		75	N	Y	Y	1.100E+003	
		1.100E+003					
Am-241	5	1	N	Y	Y	7.280E+001	
	4.800E+000	6.800E+001					
Am-241	82		N	Y	Y	2.700E+000	
	2.700E+000						
Am-243		1	N	Y	Y	1.500E+003	
		1.500E+003					
C-14	5		N	Y	Y	3.700E-001	
	3.700E-001						
C-14	6		N	Y	Y	7.800E-002	
	7.800E-002						
Ni-63	10		N	Y	Y	8.100E+000	
	8.100E+000						
Ni-63	14		N	Y	Y	8.800E+000	
	8.800E+000						
Pu-238	1553		N	Y	Y	9.100E+002	
	9.100E+002						
Pu-238		78	N	Y	Y	8.000E+003	
		8.000E+003					
Pu-238	2715		N	Y	Y	3.100E+000	
	3.100E+000						

## Site (Data) : Kh SE

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

Pu-238	4		N	Y	Y	7.300E+000	
	7.300E+000						
Pu-239	10098		N	Y	Y	3.200E+002	
	3.200E+002						
Pu-239	1		N	Y	Y	9.900E-006	
	9.900E-006						
Pu-239		8	N	Y	Y	1.000E+002	
		1.000E+002					
Pu-239	9453		N	Y	Y	1.300E+001	
	1.300E+001						
Pu-239		1	N	Y	Y	1.600E+002	
		1.600E+002					
Pu-239	18923		N	Y	Y	3.600E+002	
	3.600E+002						
Ra-226	5		N	Y	Y	3.600E-006	
	3.600E-006						
Ra-226	978		N	Y	Y	1.900E-001	
	1.900E-001						
Th-232	2		N	Y	Y	1.900E-002	
	1.900E-002						
Th-232	1		N	Y	Y	2.000E-005	
	2.000E-005						
U-238	2		N	Y	Y	1.200E-006	
	1.200E-006						
U-238	26		N	Y	Y	1.300E-003	
	1.300E-003						

**Site (Data) : Kh SE**

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

**Multiple Nuclides SRS in Disposition**

Nuclide	Activity of Sources (GBq)	cond	uncond	cat	Decay Date
Sr-90	1.300E+002	N	Y	Y	
Y-90	0.000E+000	N	Y	N	



## Site (Structure) : Kiev SE

Country: UKRAINE

Reporting Year: 2008

Full Name: Kiev State Interregional Special Enterprise

Location: 1, Komunalna str., Kiev, Ukraine, 03026

Description:

Official Website:

License Holder(s): Kiev State Interregional Special Enterprise  
 Director: Andrievsky Volodymyr  
 Fax: +38 044 259 41 13

Waste management facilities that are located at this site:

<b>Facility:</b>	<b>LRW</b>					
<b>Description:</b>	Casks for liquid radioactive waste					
<b>Storage part of facility</b>						
<b>LRW</b>						
The following shows storage status for waste classes and SRS.						
<b>Waste Class</b>	<b>Actual</b>	<b>Planned</b>				
Mid-Active	Yes	No				
Low-Active	No	No				
High-Active	No	No				
<b>List SRS?</b>	No					
<b>List UMMT?</b>	No					
<b>Capacity:</b>	1000m3					
<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>
Modul 12	cask	1962	No	No	No	No
Modul 13	cask	1962	No	No	No	No
Modul 14	cask	1962	No	No	No	No
Modul 15	cask	1986	No	No	No	No
Modul 16	cask	1986	No	No	No	No

## Site (Structure) : Kiev SE

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>Modul 8-10</b>
<b>Description:</b>	Concrete modules for solid radioactive waste

**Disposal part of facility Modul 8-10**

The following shows disposal status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	Yes	No
Low-Active	No	No
High-Active	No	No

List SRS?	No
List UMMT?	No

Type:	engineered near surface		
Facility is modular?	Yes		
Capacity existing (m3):	610	Capacity planned (m3):	610

Depth (m):	4	Host medium:	sedimentary (sand)
------------	---	--------------	--------------------

Phase Name	Start Year	End Year	Estimate
operation	1962		False
EVENT: operating license granted	1996	1999	False
EVENT: operating license granted	1999	2002	False
EVENT: operating license granted	2002	2005	False
EVENT: operating license granted	2005	2008	False
EVENT: operating license granted	2008	2011	False
EVENT: operating license revoked	1996	1997	False
EVENT: operating license re-instated	1997	1997	False
EVENT: operation suspended	1975		False

## Site (Structure) : Kiev SE

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>Module 5-7</b>
<b>Description:</b>	Concrete modules for solid radioactive waste

**Disposal part of facility                      Module 5-7**

The following shows disposal status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	Yes	No
Low-Active	No	No
High-Active	No	No

List SRS?	No
List UMMT?	No

Type:	engineered near surface		
Facility is modular?	No		
Capacity existing (m3):	1200	Capacity planned (m3):	1200

Depth (m):	4	Host medium:	sedimentary (sand)
------------	---	--------------	--------------------

Phase Name	Start Year	End Year	Estimate
operation	1975		False
ACTIVITY: upgrading	1997	1997	False
EVENT: operating license granted	1996	1999	False
EVENT: operating license granted	1999	2002	False
EVENT: operating license granted	2002	2005	False
EVENT: operating license granted	2005	2008	False
EVENT: operating license granted	2008	2011	False
EVENT: operating license revoked	1996	1997	False
EVENT: operating license re-instated	1997	1997	False
EVENT: operation suspended	1989		False

## Site (Structure) : Kiev SE

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>SRS 1-6</b>
<b>Description:</b>	Moduls for spent radioactive sources

**Disposal part of facility SRS 1-6**

The following shows disposal status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	No	No
Low-Active	No	No
High-Active	No	No

List SRS?	Yes
List UMMT?	No

Type:	engineered surface		
Facility is modular?	Yes		
Capacity existing (m3):	1	Capacity planned (m3):	1

Depth (m):	6	Host medium:	sedimentary rock (consolidated clay)
------------	---	--------------	---

Phase Name	Start Year	End Year	Estimate
operation	1962		False
EVENT: operating license granted	1996	1999	False
EVENT: operating license granted	1999	2002	False
EVENT: operating license granted	2002	2005	False
EVENT: operating license granted	2005	2008	False
EVENT: operating license granted	2008	2011	False
EVENT: operation suspended	1996		False

## Site (Structure) : Kiev SE

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>Stor 2</b>
<b>Description:</b>	Building for storage solid radioactive waste in containers

**Storage part of facility Stor 2**

The following shows storage status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	Yes	No
Low-Active	No	No
High-Active	No	No

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

<b>Capacity:</b>	328.2m3
------------------	---------

## Types of Storage Units

Storage Unit Name	Type Name	Year Opened	Closed?	Full?	Modular?	Contains SRS?
Stor 1	building	1995	No	No	No	Yes
Stor 2	building	1995	No	No	No	Yes
Stor 3	building	1995	No	No	No	Yes

## Site (Data) : Kiev SE

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

Site Name: Kiev SE

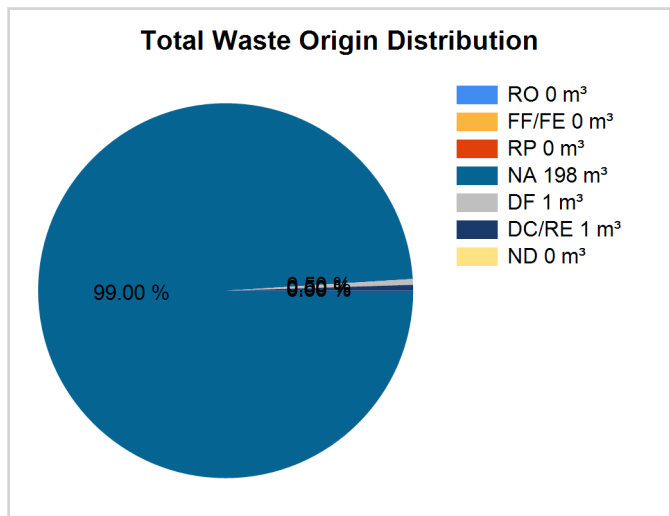
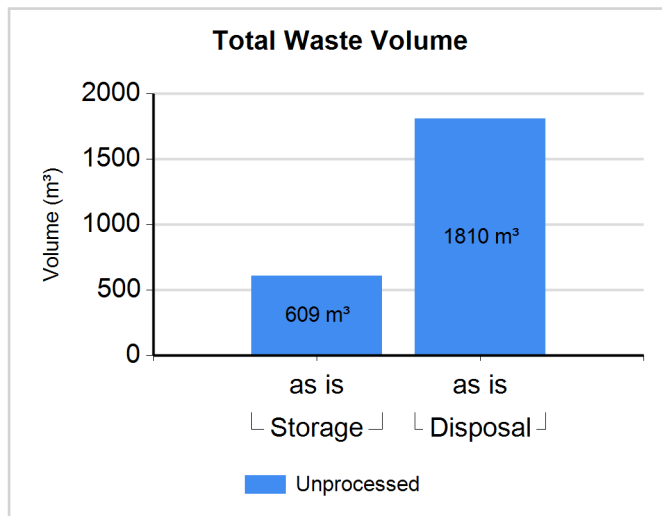
Full Name: Kiev State Interregional Special Enterprise

Inventory Reporting Date: December 2008

Waste Matrix Used: Ukraine

## 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: Mid-Active

Waste Class Name	Location / Facility	Proc	Est.	Volume "as is" (m³)	Volume "as dispo" (m³)	RO %	FF/FE %	RP %	NA %	DF %	DC/RE %	ND %
Mid-Active	Storage	N	N	609.000	609.000	0.00	0.00	0.00	99.00	0.00	1.00	0.00
Mid-Active	Disposal	N	N	1810.000	1810.000	0.00	0.00	0.00	99.00	1.00	0.00	0.00

Comment # 6793: The additional characteristics of the waste

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

## Spent Sources &lt;=30 years in Storage

Nuclide	Number of Sources/Total Activity of Sources (GBq)			c	o	n	d	c	u	n	c	o	n	d	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	6			N	Y	Y									1.455E-006	
	1.455E-006															
Ba-133	2			N	Y	Y									7.233E-005	
	7.233E-005															

## Site (Data) : Kiev SE

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

Ba-133	5			N	Y	Y	5.510E-005	
	5.510E-005							
Cd-109	20			N	Y	Y	1.360E-001	
	1.360E-001							
Cd-109	1			N	Y	Y	7.282E-005	
	7.282E-005							
Cd-109	10			N	Y	Y	1.510E-005	
	1.510E-005							
Ce-139	11			N	Y	Y	4.260E-004	
	4.260E-004							
Ce-139	6			N	Y	Y	9.504E-005	
	9.504E-005							
Ce-144	2			N	Y	Y	2.290E-007	
	2.290E-007							
Cf-252	60			N	Y	Y	7.650E-004	
	7.650E-004							
Co-57	86			N	Y	Y	2.860E-003	
	2.860E-003							
Co-57		45		N	Y	Y	5.761E+002	
		5.761E+002						
Co-57	7			N	Y	Y	1.402E-004	
	1.402E-004							
Co-60	300	1		N	Y	Y	7.790E+002	
	1.110E+002	6.680E+002						
Co-60	49			N	Y	Y	3.910E+001	
	3.910E+001							
Co-60	980	653		N	Y	Y	1.617E+005	
	6.690E+002	1.610E+005						
Cs-137	928	1564		N	Y	Y	1.080E+005	
	1.342E+003	1.067E+005						

## Site (Data) : Kiev SE

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

Cs-137	98			N	Y	Y	8.401E+001	
	8.401E+001							
Cs-137		40		N	Y	Y	3.736E+003	
		3.736E+003						
Cs-137	173	55		N	Y	Y	4.953E+004	
	2.290E+002	4.930E+004						
Eu-152	2			N	Y	Y	4.683E-004	
	4.683E-004							
Eu-152	5			N	Y	Y	1.303E-004	
	1.303E-004							
Eu-152	3			N	Y	Y	2.524E-005	
	2.524E-005							
Fe-55	22			N	Y	Y	6.890E-001	
	6.890E-001							
Fe-55	46			N	Y	Y	3.841E+000	
	3.841E+000							
H-3	19			N	Y	Y	4.050E+001	
	4.050E+001							
H-3		30		N	Y	Y	2.460E+003	
		2.460E+003						
H-3		10		N	Y	Y	7.278E+002	
		7.278E+002						
H-3	239			N	Y	Y	1.010E+002	
	1.010E+002							
H-3		1198		N	Y	Y	2.967E+005	
		2.967E+005						
Ir-192	570			N	Y	Y	3.670E-001	
	3.670E-001							
Ir-192	27	10		N	Y	Y	2.644E+003	
	3.710E+001	2.607E+003						



## Site (Data) : Kiev SE

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

Ir-192	6			N	Y	Y	4.040E-006	
	4.040E-006							
Kr-85	5			N	Y	Y	1.220E+000	
	1.220E+000							
Kr-85		1		N	Y	Y	8.450E+000	
		8.450E+000						
Kr-85	1			N	Y	Y	2.911E+000	
	2.911E+000							
Kr-85	37	27		N	Y	Y	2.171E+002	
	2.010E+001	1.970E+002						
Mn-54	9			N	Y	Y	9.170E-004	
	9.170E-004							
Mn-54	6			N	Y	Y	1.424E-004	
	1.424E-004							
Mn-54	17			N	Y	Y	3.330E-007	
	3.330E-007							
Na-22	10			N	Y	Y	5.640E-006	
	5.640E-006							
Na-22	7			N	Y	Y	1.175E-004	
	1.175E-004							
Na-22	27			N	Y	Y	1.110E-001	
	1.110E-001							
Na-22	9			N	Y	Y	1.380E-001	
	1.380E-001							
Pm-147	28	4		N	Y	Y	2.111E+001	
	4.011E+000	1.710E+001						
Pm-147	1			N	Y	Y	4.972E-001	
	4.972E-001							
Pm-147	3			N	Y	Y	7.950E+000	
	7.950E+000							

## Site (Data) : Kiev SE

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

Po-210	32			N	Y	Y	1.429E-003	
	1.429E-003							
Se-75	5			N	Y	Y	8.950E-008	
	8.950E-008							
Sn-113	7			N	Y	Y	1.044E-004	
	1.044E-004							
Sr-85	1			N	Y	Y	9.660E-003	
	9.660E-003							
Sr-90	23			N	Y	Y	9.500E+000	
	9.500E+000							
Sr-90	1273	16		N	Y	Y	9.730E+002	
	3.330E+002	6.400E+002						
Sr-90		737		N	Y	Y	3.823E+003	
		3.823E+003						
Sr-90		17		N	Y	Y	2.970E+003	
		2.970E+003						
Sr-90	700			N	Y	Y	1.350E+002	
	1.350E+002							
Th-228	3			N	Y	Y	1.805E-007	
	1.805E-007							
Th-228	7			N	Y	Y	6.130E-007	
	6.130E-007							
Tl-204	71			N	Y	Y	1.800E+001	
	1.800E+001							
Tl-204	10			N	Y	Y	1.070E-003	
	1.070E-003							
Tl-204	42			N	Y	Y	1.231E-005	
	1.231E-005							
Tm-170	7			N	Y	Y	7.920E+000	
	7.920E+000							

## Site (Data) : Kiev SE

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

Tm-170		7		N	Y	Y	4.430E+002	
		4.430E+002						
Y-88	5			N	Y	Y	1.091E-004	
	1.091E-004							
Zn-65	23			N	Y	Y	5.050E-009	
	5.050E-009							
Zn-65	5			N	Y	Y	1.091E-004	
	1.091E-004							

## Spent Sources &gt; 30 years in Storage

Nuclide	Number of Sources/Total Activity of Sources (GBq)		c	u	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							
Al-26	9		N	Y	Y	Y	1.800E+001		
	1.800E+001								
Al-26	5	4	N	Y	Y	Y	1.165E+002		
	6.500E+000	1.100E+002							
Am-241	93	4	N	Y	Y	Y	5.550E+001		
	5.500E+000	5.000E+001							
Am-241	3		N	Y	Y	Y	2.400E-004		
	2.400E-004								
Am-241	13		N	Y	Y	Y	3.700E-002		
	3.700E-002								
Am-241	394		N	Y	Y	Y	3.100E+000		
	3.100E+000								
Am-241	3		N	Y	Y	Y	1.400E+000		
	1.400E+000								
C-14	18		N	Y	Y	Y	2.100E+000		
	2.100E+000								

## Site (Data) : Kiev SE

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

C-14	6	140	N	Y	Y	4.516E+002	
	1.600E+000	4.500E+002					
K-40	14		N	Y	Y	2.100E-005	
	2.100E-005						
K-40	2		N	Y	Y	1.700E-005	
	1.700E-005						
Ni-63	2		N	Y	Y	8.300E-001	
	8.300E-001						
Ni-63	1		N	Y	Y	5.600E-001	
	5.600E-001						
Ni-63		30	N	Y	Y	7.600E+001	
		7.600E+001					
Ni-63	231		N	Y	Y	5.100E+000	
	5.100E+000						
Pu-238	14	1	N	Y	Y	3.330E+002	
	1.300E+001	3.200E+002					
Pu-238	6		N	Y	Y	1.200E+000	
	1.200E+000						
Pu-238	3		N	Y	Y	1.900E-004	
	1.900E-004						
Pu-239	1925		N	Y	Y	7.600E+001	
	7.600E+001						
Pu-239	3285		N	Y	Y	1.300E+001	
	1.300E+001						
Pu-239	62	6	N	Y	Y	6.150E+002	
	7.500E+001	5.400E+002					
Pu-239	18299	106	N	Y	Y	9.500E+002	
	6.400E+002	3.100E+002					
Pu-239	1525		N	Y	Y	7.200E+000	
	7.200E+000						

## Site (Data) : Kiev SE

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

Pu-239	5988		N	Y	Y	2.400E+002	
	2.400E+002						
Ra-226	74	4	N	Y	Y	5.020E+002	
	4.200E+001	4.600E+002					
Ra-226	21	1	N	Y	Y	3.700E+002	
	2.100E-004	3.700E+002					
Ra-226	3		N	Y	Y	2.100E-003	
	2.100E-003						
Ra-226	3		N	Y	Y	3.300E+000	
	3.300E+000						
Ra-226	2		N	Y	Y	4.900E-003	
	4.900E-003						
Th-232	2		N	Y	Y	8.500E-007	
	8.500E-007						
Th-232	5		N	Y	Y	1.200E-005	
	1.200E-005						
U-233	2		N	Y	Y	6.800E-005	
	6.800E-005						
U-233	5		N	Y	Y	1.900E-004	
	1.900E-004						
U-233	2		N	Y	Y	1.500E-006	
	1.500E-006						
U-234	8		N	Y	Y	4.200E-007	
	4.200E-007						
U-234	2		N	Y	Y	8.500E-008	
	8.500E-008						
U-234	2		N	Y	Y	4.800E-008	
	4.800E-008						
U-238	15		N	Y	Y	4.400E+000	
	4.400E+000						

## Site (Data) : Kiev SE

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

U-238	10		N	Y	Y	3.000E-001	
	3.000E-001						

## Site (Structure) : LvivSE

Country: UKRAINE

Reporting Year: 2008

Full Name: Lviv State Interregional Special Enterprise

Location: 4, Tadzhitska str., Lviv, Ukraine, 79045

Description:

Official Website:

License Holder(s): Lviv State Interregional Special Enterprise. Director: Volochyi Yaroslav. Phone: +38 0322 51 18 90. Fax: +38 0322 51 19 00

Waste management facilities that are located at this site:

<b>Facility:</b>	<b>LRW</b>					
<b>Description:</b>	Cask for liquid radioactive waste (empty)					
<b>Storage part of facility</b>						
<b>LRW</b>						
The following shows storage status for waste classes and SRS.						
<b>Waste Class</b>	<b>Actual</b>	<b>Planned</b>				
Mid-Active	No	No				
Low-Active	No	No				
High-Active	No	No				
<b>List SRS?</b>	No					
<b>List UMMT?</b>	No					
<b>Capacity:</b>	200m3					
<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>
Cask 1	cask	1963	No	No	No	No

## Site (Structure) : LvivSE

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>Module 1</b>
<b>Description:</b>	Concrete modules for solid radioactive waste

**Disposal part of facility                      Module 1**

The following shows disposal status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	Yes	No
Low-Active	No	No
High-Active	No	No

List SRS?	No
List UMMT?	No

Type:	engineered near surface		
Facility is modular?	No		
Capacity existing (m3):	200	Capacity planned (m3):	200

Depth (m):	4	Host medium:	sedimentary rock (plastic clay)
------------	---	--------------	------------------------------------

Phase Name	Start Year	End Year	Estimate
operation	1963		False
EVENT: operating license granted	1995	1998	False
EVENT: operating license granted	1998	2001	False
EVENT: operating license granted	2001	2004	False
EVENT: operating license granted	2004	2009	False
EVENT: operating license granted	2009	2012	False
EVENT: operation suspended	1982		False



## Site (Structure) : LvivSE

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>Module 2</b>
Description:	Modul for solid radioactive waste

**Disposal part of facility                      Module 2**

The following shows disposal status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	Yes	No
Low-Active	No	No
High-Active	No	No

List SRS?	No
List UMMT?	No

Type:	engineered near surface		
Facility is modular?	No		
Capacity existing (m3):	120	Capacity planned (m3):	120

Depth (m):	4	Host medium:	sedimentary rock (consolidated clay)
------------	---	--------------	---

Phase Name	Start Year	End Year	Estimate
operation	1989		False
EVENT: operating license granted	1995	1998	False
EVENT: operating license granted	1998	2001	False
EVENT: operating license granted	2001	2004	False
EVENT: operating license granted	2004	2009	False
EVENT: operating license granted	2009	2012	False

## Site (Structure) : LvivSE

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>Module 3</b>
Description:	Modul for solid radioactive waste

**Disposal part of facility                      Module 3**

The following shows disposal status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	Yes	No
Low-Active	No	No
High-Active	No	No

List SRS?	No
List UMMT?	No

Type:	engineered near surface		
Facility is modular?	No		
Capacity existing (m3):	120	Capacity planned (m3):	120

Depth (m):	4	Host medium:	sedimentary rock (consolidated clay)
------------	---	--------------	---

Phase Name	Start Year	End Year	Estimate
operation	1989		False
EVENT: operating license granted	1995	1998	False
EVENT: operating license granted	1998	2001	False
EVENT: operating license granted	2001	2004	False
EVENT: operating license granted	2004	2009	False
EVENT: operating license granted	2009	2012	False

## Site (Structure) : LvivSE

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>Module 4</b>
Description:	Modul for solid radioactive waste

**Disposal part of facility                      Module 4**

The following shows disposal status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	Yes	No
Low-Active	No	No
High-Active	No	No

List SRS?	No
List UMMT?	No

Type:	engineered near surface		
Facility is modular?	No		
Capacity existing (m3):	120	Capacity planned (m3):	120

Depth (m):	4	Host medium:	sedimentary rock (consolidated clay)
------------	---	--------------	---

Phase Name	Start Year	End Year	Estimate
operation	1989		False
EVENT: operating license granted	2009	2012	False

## Site (Structure) : LvivSE

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>Module 5</b>
Description:	Modul for solid radioactive waste

**Disposal part of facility                      Module 5**

The following shows disposal status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	Yes	No
Low-Active	No	No
High-Active	No	No

List SRS?	No
List UMMT?	No

Type:	engineered near surface		
Facility is modular?	No		
Capacity existing (m3):	120	Capacity planned (m3):	120

Depth (m):	4	Host medium:	sedimentary rock (consolidated clay)
------------	---	--------------	---

Phase Name	Start Year	End Year	Estimate
operation	1989		False
EVENT: operating license granted	1995	1998	False
EVENT: operating license granted	1998	2001	False
EVENT: operating license granted	2001	2004	False
EVENT: operating license granted	2004	2009	False
EVENT: operating license granted	2009	2012	False

## Site (Structure) : LvivSE

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>Module 7</b>
Description:	Modul for solid radioactive waste

**Disposal part of facility                      Module 7**

The following shows disposal status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	Yes	No
Low-Active	No	No
High-Active	No	No

List SRS?	No
List UMMT?	No

Type:	engineered near surface		
Facility is modular?	No		
Capacity existing (m3):	120	Capacity planned (m3):	120

Depth (m):	4	Host medium:	sedimentary rock (consolidated clay)
------------	---	--------------	---

Phase Name	Start Year	End Year	Estimate
operation	1989		False
EVENT: operating license granted	1995	1998	False
EVENT: operating license granted	1998	2001	False
EVENT: operating license granted	2001	2004	False
EVENT: operating license granted	2004	2009	False
EVENT: operating license granted	2009	2012	False

## Site (Structure) : LvivSE

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>Module 8</b>
Description:	Modul for solid biological radioactive waste

**Disposal part of facility                      Module 8**

The following shows disposal status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	Yes	No
Low-Active	No	No
High-Active	No	No

List SRS?	No
List UMMT?	No

Type:	engineered near surface		
Facility is modular?	No		
Capacity existing (m3):	120	Capacity planned (m3):	120

Depth (m):	4	Host medium:	sedimentary rock (consolidated clay)
------------	---	--------------	---

Phase Name	Start Year	End Year	Estimate
operation	1989		False
EVENT: operating license granted	2009	2012	False

## Site (Structure) : LvivSE

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>Module B</b>
Description:	Modul for solid biological radioactive waste

**Disposal part of facility                      Module B**

The following shows disposal status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	Yes	No
Low-Active	No	No
High-Active	No	No

List SRS?	No
List UMMT?	No

Type:	engineered near surface		
Facility is modular?	No		
Capacity existing (m3):	100	Capacity planned (m3):	100

Depth (m):	4	Host medium:	sedimentary rock (consolidated clay)
------------	---	--------------	---

Phase Name	Start Year	End Year	Estimate
operation	1989		False
EVENT: operating license granted	1995	1998	False
EVENT: operating license granted	1998	2001	False
EVENT: operating license granted	2001	2004	False
EVENT: operating license granted	2004	2009	False
EVENT: operating license granted	2009	2012	False

## Site (Structure) : LvivSE

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>SRS 1</b>
<b>Description:</b>	Metalic - concrete modul. Operation Years:1982-1989.

**Disposal part of facility SRS 1**

The following shows disposal status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	No	No
Low-Active	No	No
High-Active	No	No

List SRS?	Yes
List UMMT?	No

Type:	engineered near surface		
Facility is modular?	No		
Capacity existing (m3):	1	Capacity planned (m3):	1

Depth (m):	6	Host medium:	sedimentary rock (consolidated clay)
------------	---	--------------	--------------------------------------

Phase Name	Start Year	End Year	Estimate
operation	1982		False
EVENT: operating license granted	1995	1998	False
EVENT: operating license granted	1998	2001	False
EVENT: operating license granted	2001	2004	False
EVENT: operating license granted	2004	2009	False
EVENT: operating license granted	2009	2012	False
EVENT: operation suspended	1989		False



## Site (Structure) : LvivSE

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>SRS 2</b>
<b>Description:</b>	Metallic - concrete module for disposal SRS in operation from 1982

**Disposal part of facility SRS 2**

The following shows disposal status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	No	No
Low-Active	No	No
High-Active	No	No

List SRS?	Yes
List UMMT?	No

Type:	engineered near surface		
Facility is modular?	No		
Capacity existing (m3):	1	Capacity planned (m3):	1

Depth (m):	6	Host medium:	sedimentary rock (consolidated clay)
------------	---	--------------	--------------------------------------

Phase Name	Start Year	End Year	Estimate
operation	1982		False
EVENT: operating license granted	1995	1998	False
EVENT: operating license granted	1998	2001	False
EVENT: operating license granted	2001	2004	False
EVENT: operating license granted	2004	2009	False
EVENT: operating license granted	2009	2012	False

## Site (Structure) : LvivSE

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>SRS 3</b>
<b>Description:</b>	Metalic - concrete modul for disposal SRS in operation from 1982

**Disposal part of facility SRS 3**

The following shows disposal status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	No	No
Low-Active	No	No
High-Active	No	No

List SRS?	Yes
List UMMT?	No

Type:	engineered near surface		
Facility is modular?	No		
Capacity existing (m3):	1	Capacity planned (m3):	1

Depth (m):	6	Host medium:	sedimentary rock (consolidated clay)
------------	---	--------------	--------------------------------------

Phase Name	Start Year	End Year	Estimate
operation	1982		False
EVENT: operating license granted	1995	1998	False
EVENT: operating license granted	1998	2001	False
EVENT: operating license granted	2001	2004	False
EVENT: operating license granted	2004	2009	False
EVENT: operating license granted	2009	2012	False

## Site (Data) : LvivSE

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

Site Name: LvivSE

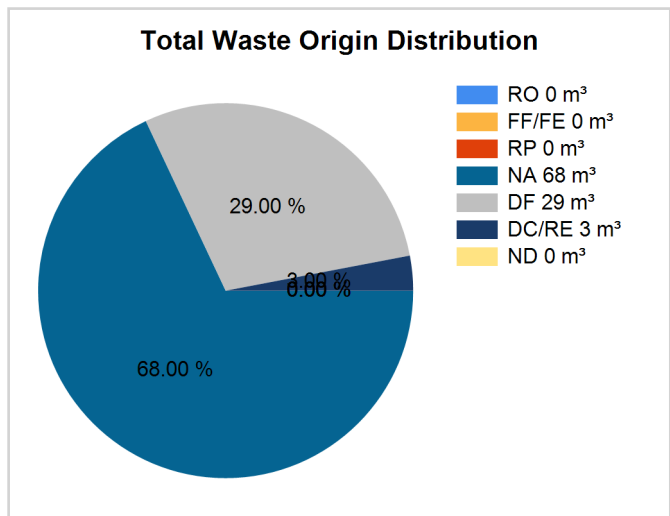
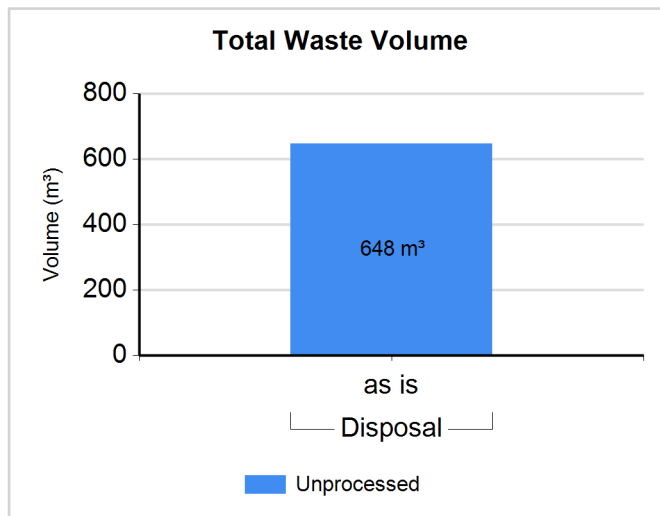
Full Name: Lviv State Interregional Special Enterprise

Inventory Reporting Date: December 2008

Waste Matrix Used: Ukraine

## 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: Mid-Active

Waste Class Name	Location / Facility	Proc	Est.	Volume "as is" (m³)	Volume "as dispo" (m³)	RO %	FF/FE %	RP %	NA %	DF %	DC/RE %	ND %
Mid-Active	Disposal	N	N	648.000	648.000	0.00	0.00	0.00	68.00	29.00	3.00	0.00

Comment # 6799: The additional characteristics of the waste

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

## Spent Sources &lt;=30 years in Disposition

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			N	Y	Y	1.100E-001	
	1.100E-001							
Ce-139	3			N	Y	Y	5.500E-009	
	5.500E-009							

## Site (Data) : LvivSE

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

Co-57	3			N	Y	Y	3.500E-005	
	3.500E-005							
Co-57	3			N	Y	Y	1.400E-005	
	1.400E-005							
Co-57	3			N	Y	Y	1.200E-008	
	1.200E-008							
Co-60	10	1		N	Y	Y	8.000E+001	
	1.900E+001	6.100E+001						
Co-60	2			N	Y	Y	4.200E-006	
	4.200E-006							
Co-60	2			N	Y	Y	5.500E-002	
	5.500E-002							
Co-60	243			N	Y	Y	7.300E+001	
	7.300E+001							
Co-60	62			N	Y	N	7.000E+000	
	7.000E+000							
Co-60	2			N	Y	Y	5.500E-002	
	5.500E-002							
Co-60	110	4		N	Y	Y	9.700E+001	
	2.400E+001	7.300E+001						
Co-60	9			N	Y	Y	1.200E-004	
	1.200E-004							
Co-60	3543			N	Y	N	3.300E+003	
	3.300E+003							
Cs-137		1854		N	Y	N	7.400E+004	
		7.400E+004						
Cs-137	81	279		N	Y	Y	1.303E+004	
	2.700E+001	1.300E+004						
Cs-137	51	14		N	Y	Y	5.750E+002	
	5.500E+001	5.200E+002						

## Site (Data) : LvivSE

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

Cs-137	11	229		N	Y	Y	1.000E+004	
	5.200E-001	1.000E+004						
Cs-137	61	57		N	Y	Y	4.568E+003	
	6.800E+001	4.500E+003						
Cs-137	5			N	Y	Y	2.800E-004	
	2.800E-004							
Cs-137	43	811		N	Y	Y	3.511E+003	
	1.100E+001	3.500E+003						
Cs-137		18		N	Y	Y	1.200E+003	
		1.200E+003						
Eu-152	10			N	Y	Y	2.600E-006	
	2.600E-006							
Fe-55	1			N	Y	Y	1.800E+000	
	1.800E+000							
Fe-55	1			N	Y	Y	1.900E-003	
	1.900E-003							
Fe-55	1			N	Y	Y	1.500E-003	
	1.500E-003							
H-3		11		N	Y	Y	1.300E+003	
		1.300E+003						
H-3	2			N	Y	Y	3.800E+000	
	3.800E+000							
H-3	6549	51		N	Y	Y	2.901E+004	
	8.800E+000	2.900E+004						
H-3	6551			N	Y	Y	5.900E+000	
	5.900E+000							
H-3		69		N	Y	N	8.300E+004	
		8.300E+004						
Hg-203	23			N	Y	Y	4.100E-008	
	4.100E-008							

## Site (Data) : LvivSE

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

Ir-192	5			N	Y	Y	1.800E-001	
	1.800E-001							
Ir-192	412			N	Y	N	1.900E+002	
	1.900E+002							
Ir-192	10	9		N	Y	Y	4.413E+002	
	1.300E+000	4.400E+002						
Ir-192		9		N	Y	Y	8.500E+001	
		8.500E+001						
Ir-192	51			N	Y	Y	1.800E+001	
	1.800E+001							
Ir-192		8		N	Y	Y	3.200E+002	
		3.200E+002						
Ir-192	7			N	Y	Y	1.700E+001	
	1.700E+001							
Kr-85	17			N	Y	Y	6.000E+000	
	6.000E+000							
Kr-85	9			N	Y	Y	2.400E+000	
	2.400E+000							
Kr-85	8			N	Y	Y	1.000E+000	
	1.000E+000							
Kr-85	9			N	Y	Y	6.000E+000	
	6.000E+000							
Mn-54	4			N	Y	Y	7.700E-008	
	7.700E-008							
Na-22	1			N	Y	Y	1.700E-006	
	1.700E-006							
Na-22	5			N	Y	Y	4.400E-003	
	4.400E-003							
Na-22	1			N	Y	Y	1.300E-006	
	1.300E-006							

## Site (Data) : LvivSE

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

Pm-147	137			N	Y	Y	1.300E-004	
	1.300E-004							
Pm-147	152			N	Y	Y	1.600E-001	
	1.600E-001							
Pm-147	1			N	Y	Y	1.200E+000	
	1.200E+000							
Pm-147	15			N	Y	N	3.500E+000	
	3.500E+000							
Sn-113	3			N	Y	Y	2.400E-009	
	2.400E-009							
Sr-90	4			N	Y	Y	3.200E-005	
	3.200E-005							
Sr-90	4355			N	Y	Y	9.400E+001	
	9.400E+001							
Sr-90	296			N	Y	N	7.700E+002	
	7.700E+002							
Sr-90	67			N	Y	Y	3.500E+000	
	3.500E+000							
Sr-90	4421			N	Y	Y	1.100E+002	
	1.100E+002							
Sr-90	58			N	Y	Y	1.800E+001	
	1.800E+001							
Sr-90	9			N	Y	Y	4.900E-001	
	4.900E-001							
Sr-90	13			N	Y	Y	5.700E-006	
	5.700E-006							
Sr-90	4			N	Y	Y	3.200E-005	
	3.200E-005							
Sr-90	32232			N	Y	Y	1.300E+001	
	1.300E+001							

## Site (Data) : LvivSE

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

Th-228	2			N	Y	Y	7.700E-004	
	7.700E-004							
TI-204	17			N	Y	Y	4.400E-004	
	4.400E-004							
TI-204	17			N	Y	Y	5.300E-004	
	5.300E-004							
Y-88	3			N	Y	Y	1.900E-010	
	1.900E-010							
Zn-65	3			N	Y	Y	2.200E-008	
	2.200E-008							

## Spent Sources &gt; 30 years in Disposition

Nuclide	Number of Sources/Total Activity of Sources (GBq)		c	o	n	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	401		N	Y	Y	Y	Y	7.000E+001		
	7.000E+001									
Am-241	153		N	Y	N	N	N	2.200E+001		
	2.200E+001									
Am-241		1	N	Y	N	N	N	2.200E+001		
		2.200E+001								
Cf-251		8	N	Y	N	N	N	8.000E+002		
		8.000E+002								
Pu-238		48	N	Y	Y	Y	Y	3.600E+002		
		3.600E+002								
Pu-238	1		N	Y	Y	Y	Y	1.100E+000		
	1.100E+000									
Pu-239	1041		N	Y	Y	Y	Y	9.800E-001		
	9.800E-001									



## Site (Data) : LvivSE

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

Pu-239	6544		N	Y	Y	8.700E+001	
	8.700E+001						
Pu-239		4	N	Y	Y	5.100E+001	
		5.100E+001					
Pu-239	4		N	Y	Y	1.400E-004	
	1.400E-004						
Pu-239	2		N	Y	Y	3.100E-006	
	3.100E-006						
Ra-226	1		N	Y	N	5.000E-003	
	5.000E-003						
Ra-226		56	N	Y	N	1.300E+002	
		1.300E+002					
Ra-226	2		N	Y	Y	7.700E-004	
	7.700E-004						
Th-232	1		N	Y	Y	2.500E-005	
	2.500E-005						

## Site (Structure) : Odessa SE

Country: UKRAINE

Reporting Year: 2008

Full Name: Odessa State Interregional Special Enterprise

Location: 10, Volodymyra str., Odessa, Ukraine, 65031

Description:

Official Website:

License Holder(s): Odessa State Interregional Special Enterprise  
 Director: Bahchevan Dmytry  
 Phone: +38 048 732 43 00  
 Fax: +38 048 721 67 86

Waste management facilities that are located at this site:

<b>Facility:</b>	<b>LRW</b>					
<b>Description:</b>	Casks for liquid radioactive waste					
<b>Storage part of facility</b>						
<b>LRW</b>						
The following shows storage status for waste classes and SRS.						
<b>Waste Class</b>	<b>Actual</b>	<b>Planned</b>				
Mid-Active	Yes	No				
Low-Active	No	No				
High-Active	No	No				
<b>List SRS?</b>	No					
<b>List UMMT?</b>	No					
<b>Capacity:</b>	Each cask is 200m3 Total volium is 400m3					
<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>
Cask 1	cask	1963	No	No	No	No
Cask 2	cask	1963	No	No	No	No

## Site (Structure) : Odessa SE

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>Modul 1</b>
<b>Description:</b>	Concrete modules 1-11 for radioactive waste disposal

**Disposal part of facility Modul 1**

The following shows disposal status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	Yes	No
Low-Active	No	No
High-Active	No	No

List SRS?	No
List UMMT?	No

Type:	engineered near surface		
Facility is modular?	Yes		
Capacity existing (m3):	583	Capacity planned (m3):	583

Depth (m):	4	Host medium:	sedimentary rock (plastic clay)
------------	---	--------------	------------------------------------

Phase Name	Start Year	End Year	Estimate
operation	1962		False
EVENT: operating license granted	1995	1998	False
EVENT: operating license granted	1998	2003	False
EVENT: operating license granted	2003	2006	False
EVENT: operating license granted	2006	2009	False
EVENT: operating license granted	2009	2012	False

## Site (Structure) : Odessa SE

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>Modul 14</b>
<b>Description:</b>	Containers for solid radioactive waste

**Storage part of facility Modul 14**

The following shows storage status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	Yes	No
Low-Active	No	No
High-Active	No	No

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

<b>Capacity:</b>	21m3
------------------	------

## Types of Storage Units

Storage Unit Name	Type Name	Year Opened	Closed?	Full?	Modular?	Contains SRS?
Module 14	container (marine)	2001	No	No	No	No

## Site (Structure) : Odessa SE

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>SRS 1</b>
<b>Description:</b>	Modul for disposal spent radioactive sources

**Disposal part of facility SRS 1**

The following shows disposal status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	No	No
Low-Active	No	No
High-Active	No	No

List SRS?	Yes
List UMMT?	No

Type:	engineered near surface		
Facility is modular?	No		
Capacity existing (m3):	1	Capacity planned (m3):	1

Depth (m):	6	Host medium:	sedimentary rock (plastic clay)
------------	---	--------------	------------------------------------

Phase Name	Start Year	End Year	Estimate
operation	1962		False
EVENT: operating license granted	1995	1998	False
EVENT: operating license granted	1998	2003	False
EVENT: operating license granted	2003	2006	False
EVENT: operating license granted	2006	2009	False
EVENT: operating license granted	2009	2012	False
EVENT: operation suspended	1991		False

## Site (Structure) : Odessa SE

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>SRS 2</b>
<b>Description:</b>	Modul for disposal spent radioactive sources

**Disposal part of facility SRS 2**

The following shows disposal status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	No	No
Low-Active	No	No
High-Active	No	No

List SRS?	Yes
List UMMT?	No

Type:	engineered surface		
Facility is modular?	No		
Capacity existing (m3):	1	Capacity planned (m3):	1

Depth (m):	6	Host medium:	sedimentary rock (plastic clay)
------------	---	--------------	------------------------------------

Phase Name	Start Year	End Year	Estimate
operation	1962		False
EVENT: operating license granted	1995	1998	False
EVENT: operating license granted	1998	2003	False
EVENT: operating license granted	2003	2006	False
EVENT: operating license granted	2006	2009	False
EVENT: operating license granted	2009	2012	False

## Site (Structure) : Odessa SE

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>Stor 15</b>					
<b>Description:</b>	Container (marine), 9 Container (marine) there are 13 of thermal-electrical generators "RITEG-1"					
<b>Storage part of facility Stor 15</b>						
The following shows storage status for waste classes and SRS.						
<b>Waste Class</b>	<b>Actual</b>	<b>Planned</b>				
Mid-Active	No	No				
Low-Active	No	No				
High-Active	Yes	No				
<b>List SRS?</b>	Yes					
<b>List UMMT?</b>	No					
<b>Capacity:</b>	48m3					
<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>
Sror 15	container (marine)	2004	No	Yes	No	Yes

## Site (Data) : Odessa SE

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

**Site Name:** Odessa SE

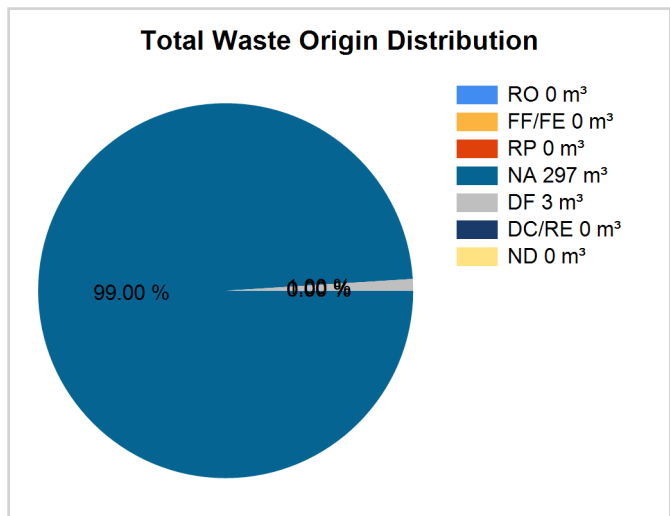
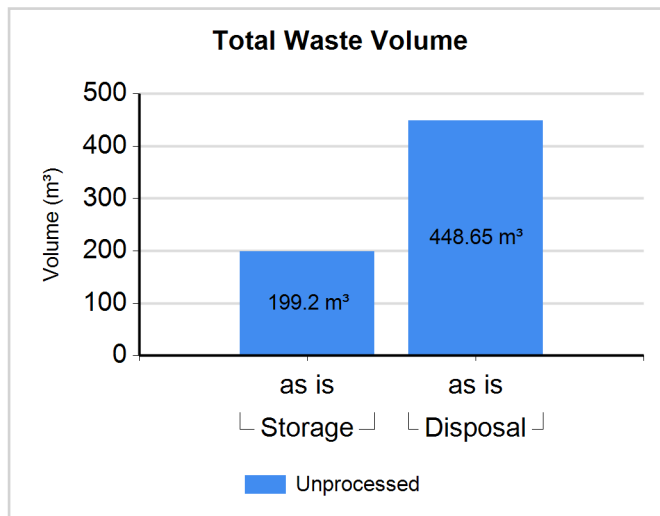
Full Name: Odessa State Interregional Special Enterprise

Inventory Reporting Date: December 2008

Waste Matrix Used: Ukraine

**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: Mid-Active**

Waste Class Name	Location / Facility	Proc	Est.	Volume "as is" (m³)	Volume "as dispo" (m³)	RO %	FF/FE %	RP %	NA %	DF %	DC/RE %	ND %
Mid-Active	Storage	N	N	151.200	151.200	0.00	0.00	0.00	99.00	1.00	0.00	0.00
Mid-Active	Disposal	N	N	448.650	448.650	0.00	0.00	0.00	98.00	2.00	0.00	0.00

Comment # 6813: The additional characteristics of the waste

Unprocessed: liquid (aqueous)

**Waste Class: High-Active**

Waste Class Name	Location / Facility	Proc	Est.	Volume "as is" (m³)	Volume "as dispo" (m³)	RO %	FF/FE %	RP %	NA %	DF %	DC/RE %	ND %
High-Active	Storage	N	N	48.000	48.000	0.00	0.00	0.00	100.00	0.00	0.00	0.00

Comment # 6817: The additional characteristics of the waste

Unprocessed: liquid (aqueous)

**Spent Sources <=30 years in Disposition**

Number of Sources/Total Activity of Sources (GBq)		
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



## Site (Data) : Odessa SE

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

Co-60		539		N	Y	Y	9.200E+003	
		9.200E+003						
Co-60	40			N	Y	Y	4.300E+000	
	4.300E+000							
Cs-137		30		N	Y	Y	7.500E+002	
		7.500E+002						
Cs-137		10		N	Y	Y	3.800E+002	
		3.800E+002						
Cs-137		974		N	Y	Y	1.200E+005	
		1.200E+005						
H-3		9		N	Y	Y	3.100E+004	
		3.100E+004						
Ir-192		48		N	Y	Y	5.300E+003	
		5.300E+003						
Ir-192		140		N	Y	Y	2.300E+003	
		2.300E+003						
Kr-85		8		N	Y	Y	2.100E+004	
		2.100E+004						
P-32	317			N	Y	Y	2.100E-001	
	2.100E-001							
Pm-147	2			N	Y	Y	1.700E-002	
	1.700E-002							
Po-210		35		N	Y	Y	2.000E+003	
		2.000E+003						
Ru-106	2			N	Y	Y	1.300E-003	
	1.300E-003							
Sr-90	1659			N	Y	Y	1.100E+002	
	1.100E+002							
Sr-90	1			N	Y	Y	1.500E-003	
	1.500E-003							

## Site (Data) : Odessa SE

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

TI-204	9			N	Y	Y	3.800E+000	
	3.800E+000							

## Spent Sources &gt; 30 years in Disposition

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	43		N	Y	Y	1.600E-003	
	1.600E-003						
Ni-63	1		N	Y	Y	1.800E+000	
	1.800E+000						
Pu-238		51	N	Y	Y	2.240E+003	
		2.240E+003					
Pu-238		10	N	Y	Y	2.920E+002	
		2.920E+002					
Pu-239	3361		N	Y	Y	1.600E+003	
	1.600E+003						
Pu-239	90		N	Y	Y	4.330E+001	
	4.330E+001						
Ra-226		80	N	Y	Y	3.370E+002	
		3.370E+002					
U-238	1		N	Y	N	8.600E-002	
	8.600E-002						

## Site (Structure) : SE Komplex

Country: UKRAINE

Reporting Year: 2008

Full Name: State Special Enterprise "Komplex"  
 Location: 52, Kirova str., Chornobyl, Ukraine, 07270  
 Description:  
 Official Website:  
 License Holder(s): State Special Enterprise "Komplex"  
 Director: Ivan Schukin  
 Fax: +38 04493 5 17 08

Waste management facilities that are located at this site:

<b>Facility:</b>	<b>PTLRW</b>					
<b>Description:</b>	PTLRW is composed of trenches and clamps with radioactive waste. Total number of the revealed trenches is till 1000 units					
<b>Storage part of facility PTLRW</b>						
The following shows storage status for waste classes and SRS.						
<b>Waste Class</b>		<b>Actual</b>	<b>Planned</b>			
Mid-Active		Yes	No			
Low-Active		No	No			
High-Active		No	No			
<b>List SRS?</b>	No					
<b>List UMMT?</b>	No					
<b>Capacity:</b>	1 296 588 m3					
<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>
PTLRW	trench (unlined)	1986	No	Yes	No	No

## Site (Structure) : SE Komplex

Country: UKRAINE

Reporting Year: 2008

<b>Facility:</b>	<b>PZRW</b>
<b>Description:</b>	Trenches for solid radioactive waste disposal - "Buryakivka"

**Disposal part of facility PZRW**

The following shows disposal status for waste classes and SRS.

Waste Class	Actual	Planned
Mid-Active	Yes	Yes
Low-Active	No	No
High-Active	Yes	No

List SRS?	No
List UMMT?	No

Type:	engineered surface		
Facility is modular?	No		
Capacity existing (m3):	660000	Capacity planned (m3):	690000

Depth (m):	4	Host medium:	sedimentary rock (plastic clay)
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Phase Name	Start Year	End Year	Estimate
operation	1987		False
EVENT: operating license granted	2003		False
EVENT: operating license granted	1996	1999	False
EVENT: operating license granted	1999	2003	False

## Site (Data) : SE Komplex

Stock of waste as at December 2008

Country: UKRAINE

Reporting Year: 2008

**Site Name:** SE Komplex

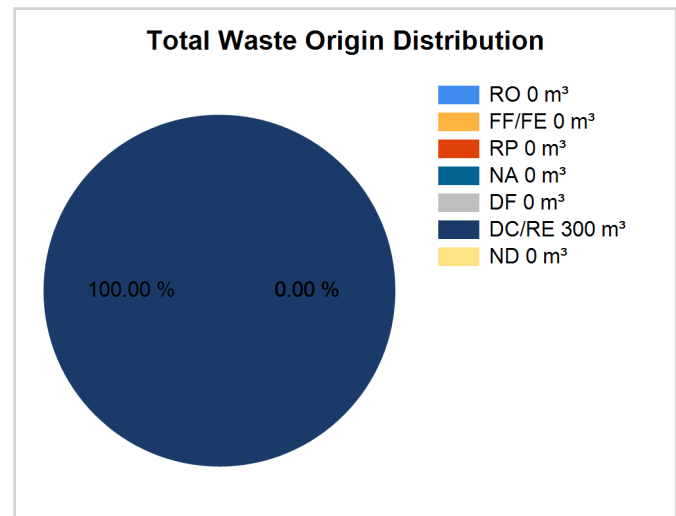
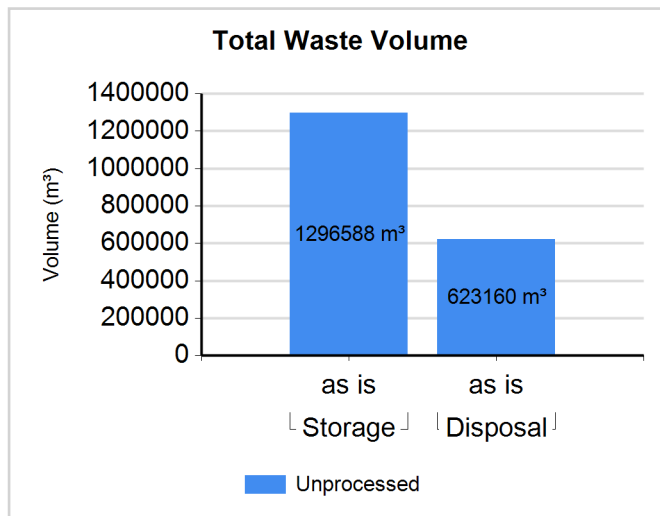
Full Name: State Special Enterprise "Komplex"

Inventory Reporting Date: December 2008

Waste Matrix Used: Ukraine

**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: Mid-Active**

Waste Class Name	Location / Facility	Proc	Est.	Volume "as is" (m³)	Volume "as dispo" (m³)	RO %	FF/FE %	RP %	NA %	DF %	DC/RE %	ND %
Mid-Active	Storage	N	N	1296588.00	1296588.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00
Mid-Active	Disposal	N	N	619200.000	619200.000	0.00	0.00	0.00	0.00	0.00	100.00	0.00

Comment # 6818: The additional characteristics of the waste

Unprocessed: flammable, resin, sludge, solid (non-dispersible)

**Waste Class: High-Active**

Waste Class Name	Location / Facility	Proc	Est.	Volume "as is" (m³)	Volume "as dispo" (m³)	RO %	FF/FE %	RP %	NA %	DF %	DC/RE %	ND %
High-Active	Disposal	N	N	3960.000	3960.000	0.00	0.00	0.00	0.00	0.00	100.00	0.00

## Site (Structure) : SE Tech

Country: UKRAINE

Reporting Year: 2008

Full Name: State Special Enterprise "Technocentr"  
 Location: 41, Radyanska str., Chornobyl, Ukraine, 07270  
 Description:  
 Official Website:  
 License Holder(s): State Special Enterprise "Technocentr"  
 Director: Tokarevskiy Volodymyr  
 Fax: +38 044 93 51 380

Waste management facilities that are located at this site:

<b>Facility:</b>	<b>Vector</b>		
Description:	Modules for radioactive waste disposal		
<b>Disposal part of facility</b>			
The following shows disposal status for waste classes and SRS.			
Waste Class	Actual	Planned	
Mid-Active	No	No	
Low-Active	No	No	
High-Active	No	No	
List SRS?	#Error		
List UMMT?	#Error		
Type:			
Facility is modular?	#Error		
Depth (m):		Host medium:	
Phase Name	Start Year	End Year	Estimate

## Regulators

Country: UKRAINE

Reporting Year: 2008

<b>Name:</b>	<b>SNRCU</b>
Full Name:	State Nuclear Regulatory Committee of Ukraine
Divison:	Radwaste Management and Decommissioning Safety Department
City or Town:	Kiev
Main Website:	

Comment **# 6780: Wastes that are regulated by the Regulator**

Matrix Ukraine - High-Active, Low-Active, Mid-Active

## Regulations / Laws

Country: UKRAINE

Reporting Year: 2008

<b>Name:</b>	<b>Law 1</b>		
Title or Name:	About Ratification of the Joint Convention on the Safety of Spent Fuel Management and the Safety of Radioactive Waste Management		
Reference Number:	1688-III		
Date Promulgated or Proclaimed:	4/20/2000	Law	

Comment **# 6781: Wastes that are regulated by the Law**

Matrix Ukraine - High-Active, Low-Active, Mid-Active

<b>Name:</b>	<b>Law 2</b>		
Title or Name:	On Use of Nuclear Energy and Radiation Safety		
Reference Number:			
Date Promulgated or Proclaimed:	2/8/1995	Law	

Comment **# 6782: Wastes that are regulated by the Law**

Matrix Ukraine - High-Active, Low-Active, Mid-Active

<b>Name:</b>	<b>Law 3</b>		
Title or Name:	On Radioactive Waste Management		
Reference Number:			
Date Promulgated or Proclaimed:	4/30/1995	Law	

Comment **# 6783: Wastes that are regulated by the Law**

Matrix Ukraine - High-Active, Low-Active, Mid-Active

<b>Name:</b>	<b>Law 4</b>		
Title or Name:	On Permissive Activities in the Nuclear Energy Field		
Reference Number:	1370-XIV		
Date Promulgated or Proclaimed:	1/11/2000	Law	

Comment **# 6784: Wastes that are regulated by the Law**

Matrix Ukraine - High-Active, Low-Active, Mid-Active



## Regulations / Laws

Country: UKRAINE

Reporting Year: 2008

<b>Name:</b>	<b>Law 5</b>		
Title or Name:	On Physical Protection of Nuclear Materials, Radioactive Wastes and Other Radiation Sources		
Reference Number:	2064-III		
Date Promulgated or Proclaimed:	10/19/2000	Law	

Comment **# 6785: Wastes that are regulated by the Law**

Matrix Ukraine - High-Active, Low-Active, Mid-Active

<b>Name:</b>	<b>Law 6</b>		
Title or Name:	On Protection of Population from Radiation Effects		
Reference Number:	15/98-BP		
Date Promulgated or Proclaimed:	1/14/1998	Law	

Comment **# 6786: Wastes that are regulated by the Law**

Matrix Ukraine - High-Active, Low-Active, Mid-Active

<b>Name:</b>	<b>Reg 1</b>		
Title or Name:	Requirement to the Structure and Content of Safety Analysis Report of the Radioactive Waste Treatment Facility		
Reference Number:	306.3.02/3.043-2001		
Date Promulgated or Proclaimed:	1/26/2001	Regulation	

Comment **# 6787: Wastes that are regulated by the Regulation**

Matrix Ukraine - High-Active, Low-Active, Mid-Active

<b>Name:</b>	<b>Reg 2</b>		
Title or Name:	Requirements to the Structure and Content of Safety Analysis Report of the Near Surface Disposal Facilities of Radioactive Waste		
Reference Number:	NP 306.3.02/3.038-2000		
Date Promulgated or Proclaimed:	10/2/2000	Regulation	

Comment **# 6788: Wastes that are regulated by the Regulation**

Matrix Ukraine - Low-Active, Mid-Active

## Regulations / Laws

Country: UKRAINE

Reporting Year: 2008

<b>Name:</b>	<b>Reg 3</b>		
Title or Name:	Rules and Procedure to Release Radioactive Waste and By-product Radioactive Materials from Regulatory Control		
Reference Number:			
Date Promulgated or Proclaimed:	12/10/1997	Regulation	

Comment **# 6789: Wastes that are regulated by the Regulation**  
Matrix Ukraine - Low-Active, Mid-Active

<b>Name:</b>	<b>Reg 4</b>		
Title or Name:	Procedure of the State Inventory of Radioactive Waste		
Reference Number:	306.5.04/2.059-2002		
Date Promulgated or Proclaimed:	2/11/2003	Regulation	

Comment **# 6790: Wastes that are regulated by the Regulation**  
Matrix Ukraine - High-Active, Low-Active, Mid-Active

<b>Name:</b>	<b>Reg 5</b>		
Title or Name:	Norms of the Radiation Protection of Ukraine. Supplement: Radiation Protection from Sources of the Potential Irradiation		
Reference Number:			
Date Promulgated or Proclaimed:	6/12/2000	Regulation	

Comment **# 6791: Wastes that are regulated by the Regulation**  
Matrix Ukraine - High-Active, Low-Active, Mid-Active

<b>Name:</b>	<b>Reg 6</b>		
Title or Name:	Sanitary Rules of Radioactive Waste Management		
Reference Number:			
Date Promulgated or Proclaimed:	10/1/1985	Regulation	

Comment **# 6792: Wastes that are regulated by the Regulation**  
Matrix Ukraine - High-Active, Low-Active, Mid-Active

## Regulations / Laws

Country: UKRAINE

Reporting Year: 2008

<b>Name:</b>	<b>Reg 7</b>	
Title or Name:	Safety Conditions and Requirements (Licensing Conditions) on Activities Associated with Radioactive Waste Processing, Storage and Disposal	
Reference Number:	NP 306.5.04/2.060-2002	
Date Promulgated or Proclaimed:	11/6/2002	Regulation

<b>Name:</b>	<b>Reg 8</b>	
Title or Name:	Provisions on the List and Requirements on the Format and Content of Documents Submitted by the Operating Organisation to Obtain Licences for Activities at Specific Stages of Radioactive Waste Disposal Facility Lifetime	
Reference Number:	NP 306.2.02/3.037-2000	
Date Promulgated or Proclaimed:	8/15/2000	Regulation

<b>Name:</b>	<b>Reg 9</b>	
Title or Name:	Safety Conditions and Requirements (Licensing Conditions) on Activities Associated with Radioactive Waste Processing, Storage and Disposal	
Reference Number:	np 306.5.04/2.060-2002	
Date Promulgated or Proclaimed:	11/6/2000	Regulation

<b>Name:</b>	<b>Reg 10</b>	
Title or Name:	Geological Disposal of Radioactive Waste Common Safety Provisions	
Reference Number:		
Date Promulgated or Proclaimed:	5/29/2007	Regulation

<b>Name:</b>	<b>Reg 11</b>	
Title or Name:	Requirements to the Structure and Content of the Safety Analysis Report of Radioactive Waste Storages	
Reference Number:	Ñ 306.4.142-2008	
Date Promulgated or Proclaimed:	2/19/2008	Regulation

<b>Name:</b>	<b>Law 7</b>	
Title or Name:	On National Environmental Program on Radioactive Waste Management	
Reference Number:		
Date Promulgated or Proclaimed:	9/17/2008	Law

## Regulations / Laws

Country: UKRAINE

Reporting Year: 2008

<b>Name:</b>	<b>Reg 12</b>		
Title or Name:	The Rules of Nuclear and Radiation Safety for Transport of Radioactive Materials		
Reference Number:	II 306.6.124-2006		
Date Promulgated or Proclaimed:	9/19/2006	Regulation	

## Future Outlook

Country: UKRAINE

Reporting Year: 2008

**Data not available.**

## Policies

Country: UKRAINE

Reporting Year: 2008

## National Systems

<b>Policy</b>		<b>(Yes;Partially;No)</b>
Q14	Has your Country implemented a national policy for radioactive waste management?	Yes
<b>Strategies</b>		<b>(Yes;Partially;No)</b>
Q15	Has your country developed strategies to implement a national policy?	Yes
<b>Requirements</b>		<b>(Yes;Partially;No)</b>
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 waste on an appropriate time-scale	Yes
Q22	taken into account interdependencies among all steps in radioactive waste generation and management	Yes
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	Yes
<b>Responsibilities</b>		<b>(Complete;Incomplete)</b>
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	Complete
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	Complete
Q114	comply with legal requirements	Complete

## Policies

Country: UKRAINE

Reporting Year: 2008

<b>Activities</b>		<b>(Yes;Partially;No)</b>
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	establish and implement a quality assurance programme for the radioactive waste generated or its processing, storage and disposal	Yes
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	Partially

<b>Clearance</b>		<b>(Yes;No)</b>
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)?	No

## Policies

Country: UKRAINE

Reporting Year: 2008

## Disposal Facilities

Licensing		(Yes - All;Yes - Some;No)
Q53	Environmental Assessment (EA)	Yes - All
Q54	Environmental Impact Statement (EIS)	Yes - All
Q55	Performance Assessment (PA)	Yes - All
Q56	Quality Assurance (QA)	Yes - All
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 - All
Operation		(Yes - All;Yes - Some;No)
Q60	Does your Country have formal, documented waste acceptance criteria for its operating or proposed disposal facilities?	Yes - All
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?	Yes
Q62	If the answer to the previous question was YES, does your Country have any policies, laws or regulations that prescribe what records are to be maintained?	Yes
Q63	Does your Country have any written policies to address active institutional controls or passive institutional controls, such as monitoring or access restrictions?	Yes
Q65	access restrictions	Yes
Q66	drainage and/or leachate collection system(s)	Yes
Q67	leachate treatment systems	Yes
Q68	environmental monitoring	Yes
Q69	facility monitoring	Yes
Q70	surveillance	Yes
Q71	plans for intervention measures during active institutional control if there is an unplanned release of radioactive materials from the disposal facility	Yes



## Policies

Country: UKRAINE

Reporting Year: 2008

**Processing/Storage**

<b>Policies/Procedures</b>		<b>(Yes;No)</b>
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)	Yes
Q78	Does your country have any legislation, regulation, or policy that waste processing must take place prior to storage (see following note)	No
<b>Implementation</b>		<b>(Yes;No)</b>
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?	No
Q82	In your Country are there any mobile waste processing facilities?	Yes
<b>Foreign</b>		<b>(Yes;No)</b>
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

## Policies

Country: UKRAINE

Reporting Year: 2008

**Spent/Disused SRS**

<b>Registration</b>		<b>(Yes;No)</b>
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
<b>Procedures</b>		<b>(Yes;No)</b>
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
<b>Agreements</b>		<b>(Yes;No)</b>
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
<b>Release / Disposal</b>		<b>(Yes;No)</b>
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?	Yes
Q103	Does your Country have plans to implement dedicated disposal facilities for spent SRS?	Yes

**Import-Export**

<b>Radioactive Waste</b>		<b>(Yes;No)</b>
Q104	Does your Country have laws or Regulations restricting either the import or export of radioactive waste (excluding spent fuel)?	Yes
<b>Spent Fuel</b>		<b>(Yes;No)</b>
Q105	Does your Country have laws or Regulations restricting either the import or export of spent fuel?	No

## Policies

Country: UKRAINE

Reporting Year: 2008

**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 - All

**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 facilities once these facilities cease operation? No

## Future Outlook

Country: UKRAINE

Reporting Year: 2008

**Data not available.**

## Future Outlook

Country: UKRAINE

Reporting Year: 2008

**Data not available.**

## Future Outlook

Country: UKRAINE

Reporting Year: 2008

**Data not available.**

## Future Outlook

Country: UKRAINE

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## Future Outlook

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**Data not available.**

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Country: UKRAINE

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**Data not available.**

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Country: UKRAINE

Reporting Year: 2008

**Data not available.**