

**Site (Data) : KRSKO NPP**

Stock of waste as at December 2007

Country: SLOVENIA

Reporting Year: 2007

**Site Name: KRSKO NPP**

Full Name: Krsko Nuclear Power Plant

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

Comment **# 14746: Management of KRSKO NPP (<http://www.nek.si>)**

Under the Contract between the Government of the Republic of Slovenia and the Government of the Republic of Croatia on the regulation of status and other legal relations connected to investment in NEK, its exploitation and decommissioning, and the Memorandum of Association, both of which entered into force on 11 March 2003, NEK is organised as a limited liability company or I.L.c.

The basic capital of NEK is divided into two equal shares owned by the partners GEN energija I.L.c. Ljubljana and Hrvatska Elektroprivreda p.l.c., Zagreb. NEK produces and supplies electricity exclusively in favour of the two partners, who each have the right and obligation to use 50% of its total output.

Comment **# 14747: About KRSKO NPP (<http://www.nek.si>)**

NEK has been in operation for twenty-five years. Projected life-time is until 2023. Over the course of the operational years NEK have witnessed a great many social changes and technological upgrades which have affected their work.

If twenty-five years ago their main aim was adapting to high professional and technical standards of nuclear technology, today the impact of market forces and public acceptability are equally important. If twenty-five years ago they were not yet considering the need to exchange domestic and international operational experience, today this is part of their everyday routine.

All of those changes, and in particular people's increased environmental awareness, are reflected in their everyday operation and in NEK's long-term strategy. They are reflected in the high level of nuclear safety. They guarantee, in the stability and competitiveness of their electricity production in comparison to other energy sources and, last but not least, in their objectives of achieving NEK's public acceptability.

Over the course of twenty-five years they have formed a qualified team which is strongly committed to their goals and to the values of safety culture. On the basis of know-how, continuous training, safe operation and operating efficiency, they are realizing an optimistic vision of the second half of NEK's lifecycle.

Attachment **#1418: Site**

NEK\_Annual\_Report\_2004.pdf

NEK annual report 2004

Attachment **#1419: Site**

NEK\_Annual\_Report\_2005.pdf

NEK annual report 2005

Attachment **#1420: Site**

NEK\_Annual\_Report\_2006.pdf

NEK annual report 2006

Attachment **#1592: Site**

NEK\_Annual\_Report\_2007.pdf

NEK annual report 2007

## Site (Data) : KRSKO NPP

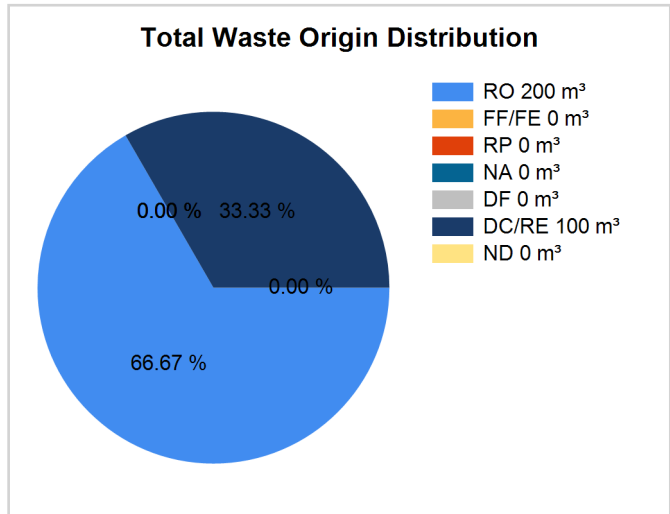
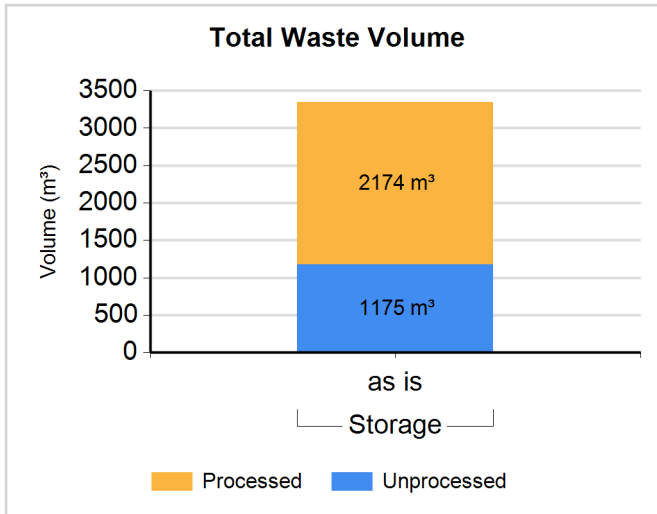
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## Waste Inventory

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



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

## Waste Class: LLW

Waste Class Name	Location / Facility	Proc	Est.	Volume "as is" (m³)	Volume "as dispo" (m³)	RO %	FF/FE %	RP %	NA %	DF %	DC/RE %	ND %
LLW	Storage	N	Y	1051.000	1051.000	0.00	0.00	0.00	0.00	0.00	100.00	0.00
LLW	Storage	Y	N	2174.000	2174.000	100.00	0.00	0.00	0.00	0.00	0.00	0.00

## Waste Class: HLW

Data available but will not be reported.

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**Processing - Treatment method(s)**

Method	Status			
	Planned	R&D program	Current practice method use over the last 5 years	Past Practice
Compaction	N	N	Same	N
Decontamination	N	N	Same	N
Evaporation	N	N	Same	N
Filtration	N	N	Same	N
Incineration	N	N	Increase	N
Ion Exchange	N	N	Same	N
Metal Melting	N	N	Increase	N
Segregation/Sorting	N	N	Same	N
Size Reduction	N	N	Increase	N
Super Compaction	N	N	Increase	N
Thermal Treatment (non incineration)	N	N	Increase	N

Comment **# 7628: Incineration**

NPP Krsko does not have own incineration facility.

Drums with combustible waste were sent for incineration in Studsvick. There were three incineration campaigns, the first took place in 1998, the second in 2002 and the third in 2005.

Comment **# 7629: Management of low and intermediate level waste**

Krsko NPP have performed periodical volume reductions with compression, supercompaction, incineration, and melting. From the year 1995 NPP used in-drum drying system (IDDS) for drying of evaporators concentrate and spent ion exchange resins. Because the working capacity of the existing IDDS system is insufficient for drying backlog sludges and sediments, the Krsko NPP hired a mobile IDDS unit, which in the 36 Annual Report 2007 on the Radiation and Nuclear Safety in the Republic of Slovenia year 2007 performed the drying of 97 drums of sludges and sediments and reduced the volume of waste to 15 drums. In 2006 the Krško NPP started continuous compression of radioactive waste with their own super-compactor installed in the storage facility. In the year 2007 there were 1,101 standard drums with compressible wastes, other wastes and evaporators concentrate compressed.

Secondary waste sent for incineration and melting in October 2005 to Studsvik in Sweden was returned to the Krsko NPP in December 2006 and stored in the radwaste storage facility in 2007. 149 standard drums which will be sent for incineration and melting in Sweden, are temporarily kept in the multipurpose building (decontamination facility).

**Processing - Conditioning method(s)**

Method	Status			
	Planned	R&D program	Current practice method use over the last 5 years	Past Practice
Bituminization	N	N		Y
Cementation	N	N	Decrease	N
Containerization	N	N	Same	N
Solidification	N	N	Increase	N