



Country Waste Profile Report for CANADA Reporting Year: 2005

*For guidance on reading Country Waste Profile Reports,
please refer to the following internet based document:*

<http://www-newmdb.iaea.org/help/profiles9/guide.pdf>

*For further information, please contact the Responsible Officer via e-mail:
NEWMDB@IAEA.org*

Waste Classification Schemes

Country: CANADA

Reporting Year: 2005

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: **NRCan**

Description: Radioactive waste is grouped into three categories: nuclear fuel waste, low-level radioactive waste (LLW), and uranium mill tailings. Since fuel and tailings are outside of the NEWMDB scope, only LLW will be reported. The % cited are a first order estimate and will be updated in a future submission. Please refer to the comment that is included for this matrix.

Waste Class Name	Distribution %		
	LILW-SL	LILW-LL	HLW
LLW	0.0	100.0	0.0
NuclearFuel	0.0	0.0	100.0
Tailings	0.0	100.0	0.0

Comment **# 7426: Waste Classification in Canada**

The classification of radioactive waste in Canada is described in the report "Inventory of Radioactive Waste in Canada", issued in 2004 by the Low Level Radioactive Waste Management Office (LLRWMO); publication LLRWMO-01613-041-10001

The definition of LLW is based on exclusion. It is all radioactive waste that is neither spent fuel nor uranium mill tailings. Therefore, LLW includes items ranging from very low activity waste from research facilities, hospitals and universities up to highly active waste such as ion exchange resins from reactor liquid clean up systems, irradiated reactor core components and CANDU "retubing" waste.

Historic waste is LLW that was managed in the past in a manner no longer considered acceptable but for which the owner cannot reasonably be held responsible and for which the federal government has accepted responsibility.

Attachment **#1011: Waste Matrix**

Inventory_Report_2004.pdf

Inventory of Radioactive Waste in Canada (2004)

This report presents the inventory of radioactive waste in Canada to the end of 2003. It provides an review on the production, accumulation and projections of radioactive waste in Canada.

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:				
Processed means:				

Groups Overview

Country: CANADA

Reporting Year: 2005

Reporting Group:	National
Inventory Reporting Date:	December 2005
Waste Matrix Used:	NRCan
Description:	The national inventory of radioactive waste in Canada is reported according to "on going" and "historical" waste. For reporting to the NEWMDB (to allow traceability), two "theoretical sites" are defined: ONGOING and HISTORICAL

Site Name	Facility Name	Facilities Defined	
HISTORIC	CCPTSS		storage
	CSP		storage
	FMLTMF		storage
	FSISM		storage
	JSM		storage
	LRSM		storage
	PGWMF		storage
	PSECS		storage
	PSETSS		storage
	PSSM		storage
	PTSS		storage
	SSRCS		storage
	STPTSS		storage
	TISM		storage
	WWMF		storage
ONGOING	AECL-CRL	processing	storage
	AECL-WL		storage
	BNPD-CMLF	processing	
	BNPD-RWOS1		storage
	BNPD-WWMF	processing	storage
	HQWMF		storage
	Monserco	processing	
	Pickering		storage
	PLWMF		storage

Country: CANADA

Reporting Year: 2005

Name:	CNSC
Full Name:	Canadian Nuclear Safety Commission
Divison:	
City or Town:	Ottawa
Main Website:	

Regulations / Laws

Country: CANADA

Reporting Year: 2005

Name:	NSCA		
Title or Name:	Nuclear Safety and Control Act		
Reference Number:	Statutes of Canada, 1997		
Date Promulgated or Proclaimed:	5/31/2000	Law	

Comment **# 7478: NSCA**

Nuclear Safety and Control Act: Canadian federal legislation on the regulation, development and use of nuclear energy and the production, possession and use of nuclear substances, prescribed equipment and prescribed information.

Name:	GNSCR		
Title or Name:	General Nuclear Safety and Control Regulations		
Reference Number:	SOR/2000-202		
Date Promulgated or Proclaimed:	5/31/2000	Regulation	

Comment **# 7479: GNSCR**

General Nuclear Safety and Control Regulations: Canadian federal regulations respecting licensing of nuclear activities,

Name:	RPR		
Title or Name:	Radiation Protection Regulations		
Reference Number:	SOR/2000/203		
Date Promulgated or Proclaimed:	5/31/2000	Regulation	

Comment **# 7480: RPRregs**

Radiation Protection Regulations: Canadian federal regulations on radiation protection relating to all nuclear facilities.

Name:	NSR		
Title or Name:	Nuclear Security Regulations		
Reference Number:	SOR/2000-209		
Date Promulgated or Proclaimed:	5/31/2000	Regulation	

Comment **# 7483: NSRregs**

Nuclear Security Regulations: Canadian federal regulations dealing with security aspects of all nuclear material and facilities.

Regulations / Laws

Country: CANADA

Reporting Year: 2005

Name:	PTNSRegs		
Title or Name:	Packaging and Transport of Nuclear Substances Regulations		
Reference Number:	SOR/2000-208		
Date Promulgated or Proclaimed:	5/31/2000	Regulation	

Comment **# 7484: PTNSRegs**

Packaging and Transport of Nuclear Substances Regulations: Canadian federal regulations dealing with the packing and transport of nuclear substances, including nuclear wastes.

Name:	NNPIECRegs		
Title or Name:	Nuclear Non-Proliferation Import and Export Control Regulations		
Reference Number:	SOR/2000/210		
Date Promulgated or Proclaimed:	5/31/2000	Regulation	

Name:	NFWA		
Title or Name:	Nuclear Fuel Waste Act		
Reference Number:	Statutes of Canada 2002		
Date Promulgated or Proclaimed:	11/15/2002	Law	

Comment **# 9930: NFWA**

The NFWA requires nuclear energy corporations to establish a waste management organization to
a) propose to the government of Canada approaches for the management of nuclear fuel waste, and
b) implement the approach

Milestones

Country: CANADA

Reporting Year: 2005

Start Year or Reference Year:	2002	End Year:	
Description of Milestone:			
Entry into force of the Nuclear Fuel Waste Act - Report submitted to the federal government in November 2005.			
Start Year or Reference Year:	2000	End Year:	
Description of Milestone:			
Entry into force of the Canadian Nuclear Safety Control Act and related regulations			

Policies

Country: CANADA

Reporting Year: 2005

National Systems

Policy	(Yes;Partially;No)
Q14 Has your Country implemented a national policy for radioactive waste management?	Yes
Comment # 7486: P-290 Managing Radioactive Waste. Policy of the Canadian Nuclear Safety Commission put in place July 2004	
Comment # 7487: P-223 Protection of the Environment: Policy of the Canadian Nuclear Safety Commission relating to environmental protection from nuclear activities. Put in place February 2001	
Comment # 7488: R-71 Deep Geological Disposal of Nuclear Fuel Waste: Regulatory Policy document of the Canadian Nuclear Safety Commission, January 1985	
Comment # 7489: R-85 Radiation Protection Requisites for Exemption of Certain Radioactive Materials from further Licensing Upon Transerral for Disposal. Regulatory Policy document of the Canadian Nuclear Safety Commission, August 1989	
Comment # 7490: R-72 Geological Considerations for Siting a Repository for Underground Disposal of High-Level Radioactive Waste. Regulatory Policy document of the Canadian Nuclear Safety Commission, September 1987.	
Comment # 9821: Policy Framework for Radioactive Waste Radioactive waste policy framework that will guide Canada's approach for radioactive waste disposal-1996 Natural Resources Canada	
Comment # 9822: G-320 Draft guide of the Canadian Nuclear Safety Commission entitled "Assessing The Long Term Safety of Radioactive Waste Management" April 2005	

Strategies	(Yes;Partially;No)
Q15 Has your country developed strategies to implement a national policy?	Yes

Policies

Country: CANADA

Reporting Year: 2005

Requirements		(Yes;Partially;No)
Q17	identified the parties involved in the different steps of radioactive waste management	Yes
Q18	specified a rational set of safety, radiological and environmental protection objectives	Yes
Q19	implemented a mechanism to identify existing and anticipated radioactive wastes	Yes
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	Partially
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	Yes
Q24	implemented a funding structure and the allocation of resources that are essential for radioactive waste management	Yes
Q25	implemented formal mechanisms for disseminating information to the public and for public consultation	Yes

Comment # 7501: relevant legislation

These requirements are covered in federal legislation, the Nuclear Safety and Control Act, and regulations.

Responsibilities		(Complete;Incomplete)
Q28	establish and implement a legal framework for the management of radioactive waste	Complete
Q29	establish or designate a regulatory body that has the responsibility for carrying out the regulatory function with regard to safety and the protection of human health and the environment.	Complete
Q30	define the responsibilities of waste generators and operators of waste management facilities	Complete
Q31	provide for adequate resources	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: CANADA

Reporting Year: 2005

Activities		(Yes;Partially;No)
Q43	perform safety and environmental impact assessments for radioactive waste management facilities	Yes
Q44	ensure adequate radiation protection for workers, the general public and the environment	Yes
Q45	ensure suitable staff, equipment, facilities, training and operating procedures are available to perform the safe radioactive waste management steps	Yes
Q46	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	Yes
Clearance		(Yes;No)
Q128	Does your country have "clearly defined clearance levels based on radiological criteria, with policy statements that material below those levels can be recycled or disposed of with non-radioactive wastes"?	No
Q129	Has your country ever used a "case-by-case" approach to clearing radioactive wastes (excluding spent/disused sealed radioactive sources)?	Yes
Q130	Has your country ever used clearance levels to dispose of, reuse or recycle radioactive waste as non-radioactive waste or as a non-radioactive resource (excluding spent/disused sealed radioactive sources)?	No

Policies

Country: CANADA

Reporting Year: 2005

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

Comment **# 7502: specification in licenses**

These requirements are generally noted in the General Nuclear Safety Regulations and are specifically addressed in each individual licence for a waste management facility.

Policies

Country: CANADA

Reporting Year: 2005

Processing/Storage

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

Policies

Country: CANADA

Reporting Year: 2005

Spent/Disused SRS

Registration		(Yes;No)
Q84	Is there a national level registry?	Yes
Q87	Are there regional-level registries (one or more)?	No
Q90	Are there local-level registries (one or more)?	No
Procedures		(Yes;No)
Q91	Does your Country have documented procedures in place to ensure that sealed radioactive sources (SRS) are transferred to secure facilities in a timely manner after their user declares them to be spent?	Yes
Agreements		(Yes;No)
Q93	Government to Government agreements	No
Q94	Government - Supplier agreements	No
Q95	Supplier-User agreements	Yes
Q97	Do any agreements include suppliers that are outside of your Country?	Yes
Release / Disposal		(Yes;No)
Q99	Does your Country have any regulations to free-release spent sealed radioactive sources (SRS)?	Yes
Q100	Has your Country disposed of spent SRS in existing disposal facilities for LILW or HLW waste?	Yes
Q101	Does your Country plan to dispose of spent SRS in existing or planned disposal facilities for LILW or HLW waste?	Yes
Q102	Has your Country implemented dedicated disposal facilities for spent SRS?	No
Q103	Does your Country have plans to implement dedicated disposal facilities for spent SRS?	No

Comment **# 7504: federal regulations**

Federal regulations cover release and disposal of all radioactive materials: General Nuclear Safety and Control Regulations and the Radiation Protection Regulations.

Country: CANADA

Reporting Year: 2005

Import-Export**Radioactive Waste****(Yes;No)**

Q104 Does your Country have laws or Regulations restricting either the import or export of radioactive waste (excluding spent fuel)? Yes

Comment **# 7492: Import-Export**

Nuclear Non-Proliferation Import and Export Control Regulations made pursuant to the Canadian Nuclear Safety and Control Act. Administered by the Canadian Nuclear Safety Commission.

Spent Fuel**(Yes;No)**

Q105 Does your Country have laws or Regulations restricting either the import or export of spent fuel? Yes

Comment **# 7503: relevant regulations**

Federal regulations made pursuant to legislation: Nuclear Non-Proliferation Import and Export Control Regulations

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

Q106 Does your Country have high-level liquid wastes in storage? Yes

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

Q107 If your Country has high-level liquid wastes in storage, are there documented plans in place to process these liquids? No

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

Q108 If your Country has high-level liquid wastes in storage, are there plans to have this waste be processed within a specified time frame? 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

Policies

Country: CANADA

Reporting Year: 2005

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

Q111 Does your Country require that funds should be set aside in support of future waste management activities, such as decommissioning activities? Yes - Some

Facilities**(Yes;No)**

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

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

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

Q112 Does your Country require a time frame for the decommissioning of nuclear fuel cycle facilities once these facilities cease operation? Yes - All

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

Future Outlook

Country: CANADA

Reporting Year: 2005

Data not available.

Future Outlook

Country: CANADA

Reporting Year: 2005

Data not available.

Future Outlook

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Data not available.

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