CANADA
National Reporting to CSD-18/19
Thematic Profile: Waste Management

1 Hazardous Waste Management

1.1 Coordinating Bodies

In Canada, the management of hazardous waste and hazardous recyclable materials is a shared responsibility. The federal government regulates international and interprovincial/territorial movements of hazardous waste and hazardous recyclable materials, while provincial/territorial governments regulate movements within their own jurisdictions. The provinces and territories are also responsible for establishing controls for licensing waste and recycling generators, carriers and treatment facilities.

1.2 Status of Hazardous Waste Management in Canada

Hazardous waste and hazardous recyclable materials in Canada are usually collected by municipalities, the private sector and/or through the mechanisms of a product stewardship/extended producer responsibility program. Hazardous waste and hazardous recyclable materials can be reused, recycled or sent for disposal/incineration. In 2006, the Canadian Council of Ministers of the Environment (CCME)[1] prepared a set of National Guidelines for Hazardous Waste Landfills, in a further effort to harmonize hazardous waste landfill sites across provinces/territories.

1.3 Legislation and Regulations

At the federal level, the *Canadian Environmental Protection Act, 1999* (CEPA 1999) provides the government with the authority to control the movement of hazardous waste, hazardous recyclable material and non-hazardous waste.

The *Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations*, under CEPA 1999, ensure that international movements of hazardous wastes and hazardous recyclable materials are handled in an environmentally sound manner.

Under authority of CEPA 1999, Canada implements the terms of international agreements to which it is party through regulatory instruments. Implementing the terms of these agreements demonstrates the intention to protect Canada's environment and the health of Canadians from risks posed by unregulated traffic in hazardous wastes and hazardous recyclable materials.

The *Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations* contribute to the implementation of Canada's international obligations regarding the transboundary movement of hazardous wastes and recyclables, including

[1] The Canadian Council of Ministers of the Environment is comprised of the environment ministers from the federal, provincial and territorial governments. The ministers meet to discuss national environmental priorities and determine work to be carried out. The Council focuses on issues that are national in scope and that require collective attention by a number of governments. See: http://www.ccme.ca/

the *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal*, (ratified by Canada in 1992), the Organisation for Economic Co-operation and Development (OECD) *Decision of Council on the Control of Transboundary Movements of Wastes Destined for Recovery Operations*, C(2001)107, and the *Canada-U.S.A. Agreement on the Transboundary Movement of Hazardous Wastes*, 1986 (amended in 1992).

The *PCB Waste Export Regulations*, 1996 (PCBWER) restricts exports of Polychlorinated Biphenyl (PBC) wastes to the United States for treatment and destruction. Export is only allowed for thermal or chemical destruction at authorized and environmentally sound United States facilities. Export for landfilling and purposes other than those listed in the regulations is not allowed. Exports of PCB wastes to countries other than the United States continue to be prohibited.

The *PCB Regulations* came into force on September 5, 2008. The purpose of the Regulations is to improve the protection of Canada's environment and the health of Canadians by minimizing the risks posed by the use, storage and release of polychlorinated biphenyls (PCBs) and by accelerating the elimination of these substances in use or in storage.

1.4 Policies, Plans and Standards

Phase-out of toxic, persistent and bio-accumulative waste

Canada's Chemicals Management Plan (CMP), aims to bring all existing federal programs together in a single strategy for protecting human health and the environment through assessment and management of the risks posed by chemicals. The CMP builds on Canada's Toxic Substances Management Policy. Additional information can be found in Canada's Chemical thematic profile as part of the UNCSD process.

Canada-wide Standards

Canada-wide Standards (CWS) have been developed for a series of pollutants, either occurring naturally or man made, that are found in the Canadian environment. Standards have been developed for mercury, dioxins and furans and polychlorinated biphenyls (PCBs).

In 2001, Canada worked with provincial governments to begin addressing the issue of mercury-containing products through the Canada-wide Standards process, which included the active engagement of provincial counterparts and interested non-governmental organizations, in addition to public consultations. The Canadian Council of Ministers of the Environment (CCME) endorsed CWSs for mercury-containing lamps and for dental amalgam waste. The CCME's Report on Compliance and Evaluation can be found online.

Polychlorinated dibenzo-p-dioxins (PCDDs) and polychlorinated dibenzofurans (PCDFs), commonly known as dioxins and furans, are toxic, persistent, bioaccumulative, and result predominantly from human activity. Dioxins and furans are slated for virtual elimination under CEPA (1999), the federal Toxic Substances Management Policy and the CCME Policy for the Management of Toxic Substances. In 2004, the CCME released

a progress report in achieving Canada-wide standards for dioxins and furans. Also, the Government of Canada has developed a Technical Document for Batch Waste Incineration to provide guidance for owners and operators of batch waste incinerators regarding proper system selection, operation, maintenance and record keeping, with the goal of assisting them in achieving the intent of the Canada-wide Standards for dioxins/furans and mercury, and reducing releases of other toxic substances.

In 1995, the CCME published a set of standards and protocols for PCB transformer decontamination. The protocols delineate environmentally acceptable methods for decontaminating PCB transformers, which contain most PCBs currently in use in Canada.

Pollution Prevention Plans (P2)

Several pollution prevention planning notices have been published, under the authority of CEPA 1999, requiring the preparation and implementation of P2 plans in respect of a number of toxic substances.

The Government of Canada led a workgroup comprising of representatives from the vehicle and steel manufacturing and vehicle recycling industries, provinces/territories, and the environmental community to encourage industry support for a voluntary program for reduction in the use of mercury and the safe management of waste containing mercury. The outcome was the *Notice requiring the preparation and implementation of pollution prevention plans in respect of mercury releases from mercury switches in end-of-life vehicles processed by steel mills* published in 2007. Vehicle manufacturers and steel mills subject to the Pollution Prevention Plan are now required to support a national mercury switch collection program that recovers switches from vehicles in an environmentally safe manner leading to a reduction in mercury releases. Also in respect to mercury, a *Proposed Notice Regarding Pollution Prevention Planning in Respect of Mercury Releases from Dental Amalgam Waste* was published in 2009. The Pollution Prevention Plan will require dental facilities who have not implemented best management practices for dental amalgam waste, to prepare and implement a pollution prevention plan.

Environmental Impact Assessment

In Canada, environmental impact assessments are conducted both at the provincial and federal levels of government accordingly. The *Canadian Environmental Assessment Act* (CEAA) and its regulations are the legislative basis for the federal practice of environmental assessment for proposed activities and projects requiring federal approval or are supported by federal funding. Each province has environmental assessment legislation and subsequent regulations. Waste management facilities and landfill sites are subject to these assessments, as well as provincial processes for approval and permits. The siting of landfill sites is subject to provincial and/or federal environmental assessments as well as, in most cases, public and stakeholder consultations.

1.5 Major Groups Involvement and Public Consultation

Generally speaking, major stakeholders are commonly consulted within the policy process in regards to decision making for waste management programs, policies and legislation. As part of a larger duty to consult, federal, provincial/territorial and municipal

governments may hold public consultation sessions to discuss new projects, proposed legislation and/or regulations. The Government of Canada maintains the Consulting with Canadians site which provides a structured, single-point access to on- and off-line consultations. Consultations listed on the site are updated regularly by participating government departments and agencies.

A key element of the Canadian federal regulatory process is the place of multi-stakeholder consultations, by which government and non-government organizations, interested parties and businesses are permitted to comment on proposed policies and legislation at early stages. The CEPA Environmental Registry serves as a comprehensive source of information on a variety of CEPA 1999-related tools, including proposed and existing policies, guidelines, codes of practice, government notices and orders, agreements, permits, and regulations. The Registry enables the public to monitor the progress of these instruments from the proposal stage to their final publication in the Canada Gazette.

1.6 Programmes and Projects

Canada is an ongoing participant in global initiatives, such as electronic waste under the *Basel Convention*. Canada's involvement includes financial contributions to help developing countries build capacity for the management of hazardous wastes. The Government of Canada supports the launch of a new Basel partnership, the Partnership on Action for Computer Equipment (PACE), which builds on the partnership for mobile phones. Other programs, such as Computer for Schools, co-founded by the Government of Canada in 1993, provide opportunities for the reuse of computer equipment.

1.7 Notification Systems, Inventories and Registries

Notification System on Exported, Imported and Transited Hazardous Waste and Hazardous Recyclable Material

With data collected through Canada's manifest system for hazardous wastes and hazardous recyclable materials, the Government of Canada publishes an annual report called Resilog on its website which includes transboundary movement data for proposed exports, import, and transits of hazardous wastes and hazardous recyclable materials.

Inventory on Contaminated Sites

The Government of Canada maintains the Federal Contaminated Sites Inventory, which includes information on all known federal contaminated sites under the custodianship of departments, agencies and consolidated Crown corporations as well as those that are being or have been investigated to determine whether they have contamination arising from past use that could pose a risk to human health or the environment.

Notification Systems and Registries

The National Pollutant Release Inventory (NPRI) is Canada's legislated, publicly accessible inventory of pollutant releases (to air, water and land), disposals and transfers for recycling. Additional information on the NPRI can be found in Canada's Chemical thematic profile submitted as part of the UNCSD process.

1.8 International Cooperation

Canada's International Obligations

Canada supports the goals of the *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal*, the *OECD Decision Concerning the Control of Transboundary Movements of Wastes Destined for Recovery Operations*, the *Canada-U.S.A. Agreement on the Transboundary Movement of Hazardous Wastes*, and implements part of its international obligations domestically through the *Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations.* Canada's work related to waste also include cooperation with several other organizations, forum, initiatives such as the *North American Commission for Environmental Cooperation*, *Stockholm Convention on Persistant Organic Pollutants*, the *Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade*, the *Montreal Protocol on Substances That Deplete the Ozone Layer*, the *Strategic Approach to International Chemicals Management, International Maritime Organization*, etc.

2. Solid Waste Management

2.1 Coordinating Bodies

In Canada, the responsibility for solid waste management is shared among the federal, provincial/territorial and municipal governments. Municipal solid waste (MSW) refers to recyclables and compostable materials, as well as garbage from homes, businesses, institutions, and construction and demolition sites. Collection, diversion (recycling and composting) and disposal operations are the responsibility of municipal governments, while the provinces and territories are responsible for providing the regulatory and policy frameworks for waste management operations, including approval, licensing and monitoring.

Regional or local MSW management issues only involve the federal government when federal lands or resources are affected, interprovincial or international transport is involved, federal assistance is provided, or, in some instances, the issue involves management of toxic substances or greenhouse gas emissions. The Government of Canada also works with the provinces, territories, municipalities, and industry to provide support, research, and tools that encourage sustainable MSW management practices. Canada has taken a decentralized approach to MSW.

2.2 Legislation and Regulations

MSW is mainly a provincial/territorial and municipal jurisdiction. MSW is regulated through provincial environmental, land use, and health acts and regulations as well as by municipal waste and nuisance by-laws. At the federal level, the focus of the *Canadian Environmental Protection Act 1999* (CEPA 1999) relates to pollution prevention and the control of toxic substances and hazardous waste. Authority to control the export and import of non-hazardous solid waste for final disposal is included in the Act.

Each province/territory has its own set of legislation and regulations governing waste management within their jurisdiction. Links to provincial governments are provided on the Government of Canada's website.

2.3 Strategies, Policies, and Plans

At the national level, the Government of Canada has been working with provinces and territories, under the auspices of the Canadian Council of Ministers of the Environment (CCME) to support the development of Extended Producer Responsibility (EPR) programs for a variety of products. These programs give industry the responsibility for managing, collecting and funding recycling, as well as for the environmentally sound management of hazardous and non-hazardous waste. Currently, there is a large number of provincial EPR programs including a wide range of products (e.g. used oil, paint, packaging, tires, electronics, pharmaceuticals, batteries, solvents, household hazardous wastes, refrigerants, pesticide containers). The majority of the programs are regulated at the provincial level. A Canada-wide Action Plan for Extended Producer Responsibility and a Canada-wide Strategy for Sustainable Packaging, prepared under the auspices of the CCME, are currently being finalized. The Canada-wide Action Plan for EPR aims to harmonize provincial efforts in terms of EPR program implementation for various hazardous and non-hazardous products. The Government of Canada displays on its website the wide range and number of regulated Extended Producer Responsibility and Product Stewardship programs in Canada.

The Government of Canada's Policy on Green Procurement requires federal departments to integrate environmental performance considerations into all government procurement decisions. The Policy is set within the context of value for money and applies the principles of total lifecycle management. The Policy translates into the integration of environmental criteria and features into solicitations and procurement instruments for a wide range of goods and services.

In addition, the Government of Canada, through Public Works and Government Services Canada, has also developed the "The Environmentally Responsible Construction and Renovation Handbook." The Government of Canada is also responsible for waste management and waste reduction activities in federal facilities. These initiatives target waste minimization at-source.

Some provincial governments, such as Nova Scotia and Alberta have developed province-wide waste management strategies. Nova Scotia achieved an impressive diversion rate of 40.7% (2006) in part through its *Solid Waste Resource Management Strategy*, established in 1995.

2.4 Major Groups Involvement and Public Consultation

See section 1.5.

2.5 Waste Related Programmes and Initiatives

There are a number of waste prevention and recycling initiatives in Canada. Following are some examples of Government of Canada led initiatives.

The Government of Canada has been involved in the Pilot Emission Removals, Reductions, and Learnings (PERRL) initiative from 2002 through 2008. The PERRL initiative aimed to purchase emission reductions from new projects in strategic areas, such as landfill gas capture and combustion, with the potential to help Canada achieve its climate change obligations under the Kyoto Protocol. The Government of Canada also developed a green house gas (GHG) calculator for waste management to help municipalities and other users estimate GHG emission reductions from different waste management practices, including recycling, composting, anaerobic digestion, combustion and landfilling.

The Government of Canada launched in 2001 the Enhanced Recycling program as part of a five-year (April 2001-March 2006) $3.4 million component of the Minerals and Metals Program. The Enhanced Recycling Program was designed to stimulate recycling activities within Canada by seeking like-minded partners to participate in projects that take current recycling activities to higher levels.

2.6 Waste Diversion

Some municipalities and provincial governments have committed to waste reduction goals (see examples in section 2.3). The latest nation-wide diversion rates are available from Statistics Canada.

2.7 Capacity-Building, Education, Training, and Awareness-Raising

Municipalities, provincial governments and some non-profit associations contribute to public education on the issue of waste prevention, recycling and environmentally sound disposal of hazardous wastes. For example, the Waste Reduction Week in Canada is an annual event that raises public awareness on the issue of waste. The event provides municipalities, schools and business with the tools needed to reduce the total amount of waste sent for disposal.

2.8 Research and Technologies for Waste Management

There is ongoing research conducted by the private sector and governments to develop new technologies for landfill sites, for material recovery facilities and recycling programs. The Government of Canada supports these efforts as a step towards sustainable waste management practices. The Federation of Canadian Municipalities supports capacity building and policy research towards developing new programs and initiatives that reduce the environmental impact of waste management activities.

2.9 Financing: Waste Management and Public Education

In Canada, municipalities are responsible for waste management services to households and various facilities. Municipalities have the opportunity to establish a fee for service (e.g. fee per bag), landfill fees or other fees accordingly, in order to fund waste management services. Property taxes and other municipal taxes provide the largest part of the funding needed to operate waste management programs at the municipal level. There are a number of funds available to municipalities, communities and non-profit organizations to develop capacity and projects specific to waste management and pollution prevention. Among these are the New Brunswick Environmental Trust Fund,

Nova Scotia's Resource Recovery Fund Board's funding program, the Manitoba Waste Reduction and Pollution Prevention Fund, as well the Government of Canada's EcoAction Community Funding Program.

The Government of Canada has endowed the Federation of Canadian Municipalities with $250 million to establish the Green Municipal Funds and support municipal government action to cut pollution, reduce GHG emissions, and improve quality of life. Since the program's inception, a number of MSW management projects have benefited from the funds.

Also, Sustainable Development Technology Canada (SDTC), a not-for-profit foundation, finances and supports the development and demonstration of clean technologies. SDTC operates two major funds aimed at the development and demonstration of innovative technological solutions, supporting projects that address climate change, air quality, clean water, clean soil as well as renewable fuels.

2.10 Domestic and International Cooperation

The Government of Canada works diligently with provinces/territories to develop capacity for waste reduction and pollution prevention programs. Canada also participates on a number of international efforts to prevent waste, such as the Basel Convention Technical Guidelines on the Environmentally Sound Management of Mercury Waste , OECD on Sustainable Materials Management and the G8 3R Action Plan. (See section 1.8 above).

3 Sound Management of Radioactive Waste in Canada

3.1 Coordinating Bodies

Canada's federal government has jurisdiction over nuclear energy. Natural Resources Canada is the department responsible for nuclear energy policy. The Canadian Nuclear Safety Commission (CNSC), as Canada's independent regulatory authority, regulates the use of nuclear energy and materials to protect the health and safety of persons, the environment and national security and to respect Canada's international commitments on the peaceful use of nuclear energy.

The CNSC's Regulatory Policy *Managing Radioactive Waste* defines radioactive waste as any material (liquid, gaseous or solid) that contains a radioactive nuclear substance, as defined in section 2 of the *Nuclear Safety and Control Act* (NSCA) that the owner has no foreseen use and is determined to be a waste product.

Licensing of Nuclear Operations

Canada maintains the philosophy that licensees are responsible for the safe operations of its facilities. Licensed activities produce different types of radioactive waste, such as uranium mill tailings, used nuclear fuel, decommissioning waste, industrial waste and cleaning material contaminated with low levels of nuclear substances; each presenting its own level of hazard. Since all nuclear substances associated with licensed activities will eventually become radioactive waste, the safe short and long-term management of

radioactive waste is taken into consideration during the review process for any licensed activities.

The CNSC uses a comprehensive licensing system covering the entire life-cycle of a radioactive waste management facility, from site preparation, construction, operation, decommissioning and finally, abandonment. This step-wise approach requires a separate licence for each phase. The outcome of the licensing process feeds back into the compliance program – to verify that the licensee fulfills its regulatory requirements.
Although the nuclear sector is subject to federal jurisdiction through the NSCA, the CNSC, as the lead agency, utilizes a harmonized or joint review approach in its licensing and compliance process. This approach includes other federal, or provincial or territorial departments in such areas as health, environment, transport and labour whose area of responsibility could impact on the proposed nuclear facility. This approach allows for a comprehensive assessment of the waste management facilities.

3.2 Legislation and Regulations

Federal legislation that regulates and oversees the nuclear industry, including the management of radioactive waste, is comprised of the *Nuclear Safety and Control Act* (NSCA), *Nuclear Fuel Waste Act* (NFWA), *Nuclear Liability Act*, and the *Nuclear Energy Act*. The nuclear industry is also subject to the *Canadian Environmental Assessment Act*, the *Canadian Environmental Protection Act* and the *Fisheries Act*.

The NSCA is the key piece of legislation which establishes the CNSC as an independent regulatory body, responsible for regulating the use of nuclear material in Canada. There are nine safety-related regulations issued under the NSCA. The CNSC performs regulatory oversight and verifies that licensees and operators comply with regulations and licence conditions. In addition to the NSCA and its associated regulations, documents that guide the CNSC's review of waste management programs are Regulatory Policy, P-290, *Managing Radioactive Waste* and Regulatory Guide, G-320, *Assessing the Long-Term Safety of Radioactive Waste Management.*

3.3 Strategies, Policies, and Plans

The Government of Canada has put in place a structure of policies, legislation and responsible organizations that govern the management of radioactive waste in Canada. The 1996 Government of Canada *Policy Framework for Radioactive Waste* sets the stage for institutional and financial arrangements to manage radioactive waste in a safe, comprehensive, environmentally sound, integrated and cost-effective manner. The *Policy Framework* states that the Government of Canada has the responsibility to develop policy, regulate, and oversee owners to ensure that they comply with legal requirements and meet their funding and operational responsibilities in accordance with approved waste management plans. Waste owners are responsible for the funding, organization, management, and operation of long-term waste management facilities and other facilities required for their wastes.

3.4 Major Groups Involvement and Public Consultations

Canada recognizes that open, transparent and timely communications is central to the work and management of Canada's nuclear regulatory regime. This is reflected in the CNSC public hearings where the public has an opportunity to participate in the regulatory process. The Commission Tribunal takes into account the views, concerns and opinions of interested parties, such as local communities, non-governmental organizations, when establishing regulatory policy, making licensing decisions and implementing programs.

3.5 Programmes and Projects: Management of Radioactive Waste

Radioactive waste in Canada is currently managed in storage facilities, which are safe, secure and environmentally sound. The owners of radioactive waste are responsible for managing the waste they produce. The operation of Canada's waste management facilities are regulated and monitored by the CNSC to protect the health, safety and security of Canadians as well as the environment.

The process for radioactive waste management in Canada is similar to that of other industrialized countries. The primary emphasis is placed on minimization, volume reduction, conditioning and long-term storage of the waste. There are four main classes of radioactive waste: low-level radioactive waste, intermediate-level radioactive waste, high-level radioactive waste (e.g. used nuclear fuel) and uranium mine and mill waste. Management techniques depend on the characteristics of the waste. For example, certain types of radioactive waste, such as that from hospitals, universities and industry, contain only small amounts of radioactive materials with short half-lives. This means that the radioactivity decays away in hours or days. After safely holding the waste until the radioactivity has decayed to levels authorized by the CNSC, it can then be disposed of by conventional means.

Low and intermediate-level radioactive waste (L&ILRW) is currently held on site in interim storage facilities, which are safe, secure and environmentally sound.
With the notable exception of L&ILRW originating from nuclear power plants, L&ILW that require long-term management may be returned to the manufacturer or may be transferred to an authorized waste management operator such as the waste management facility operated by Atomic Energy of Canada Limited (AECL) at its Chalk River Laboratories (CRL) on a fee-for-service basis.

All used nuclear fuel in Canada is currently held on site where it is produced in interim storage facilities, which are safe, secure and environmentally sound. The only exception is the used nuclear fuel produced at the now-closed NPD (Nuclear Power Demonstration) facility. The used nuclear fuel from this facility was transferred to the AECL CRL, where it was placed in a dry storage facility.

In regards to uranium tailings and mill waste, the long-term management in near-surface facilities adjacent to the mines and mills is the only practical option, given the large volumes of waste generated in mining and milling operations. The tailings are monitored and managed in facilities, such as engineered tailing ponds or placed back in mined-out open pits.

Examples of Initiatives

The Canadian nuclear industry and the Government of Canada are currently developing and implementing several long-term radioactive waste management solutions that will protect health, safety, security and the environment.

- The Nuclear Fuel Waste Act provides the process for decision-making and implementation of the Government of Canada's Adaptive Phased Management (APM) approach for the long-term management of used nuclear fuel. The Nuclear Waste Management Organization is required to implement the APM approach with the Government of Canada's oversight.
- The Ontario Power Generation has proposed a deep geological repository which will be a long-term deep underground storage facility for its L&ILW.
- The Port Hope Area Initiative is a community-initiated environmental remediation project. The initiative aims the cleanup and the safe long-term management of historic low-level radioactive waste in the Port Hope area.
- The Government of Canada's Nuclear Legacy Liabilities Program, launched in 2006, provides a long-term strategy to manage legacy waste and contamination on AECL sites, including Chalk River Laboratories and Whiteshell Laboratories.

3.6 Transportation of Radioactive Waste

The transport of radioactive waste within Canada is subject to the *Packaging and Transport of Nuclear Substances Regulations* which are based on the International Atomic Energy Agency (IAEA) Safety Standards Series No. TS-R-1, *Regulations for the Safe Transport of Radioactive Material*.

3.7 Research and Technology

The CNSC's Research and Support program provides CNSC staff with access to independent advice, such as expertise, experience, information and other resources, via contracts or contribution agreements placed with other agencies and organizations in Canada and internationally. The CNSC Research and Support Program is independent of research and development programs conducted by industry.

3.8 Financing

Canada applies the polluter pays principle, by which the Government of Canada has clearly indicated that waste owners are financially responsible for the management of their radioactive waste, and has set in place mechanisms to ensure that this financial responsibility does not fall to the public. In 2002, under the *Nuclear Fuel Waste Act*, the owners of used nuclear fuel were specifically required to establish segregated funds to fully finance long-term waste management activities. CNSC licensees of radioactive waste management facilities and uranium mines and mills must provide financial guarantees to ensure that adequate financial resources are available for decommissioning of these facilities and managing the resulting radioactive wastes.

3.9 Cooperation

The CNSC collaborates with various agencies to ensure that nuclear cooperation is conducted consistently with international agreements. Canada actively participates in the IAEA, the Nuclear Energy Agency of the Organization for Economic Co-operation and

Development, the International Commission on Radiological Protection, and Canada provides assistance to developing countries through bilateral cooperation and participation in IAEA programs.

Canada is a Contracting Party to the *Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management* (Joint Convention). The CNSC is responsible for coordinating Canada's responsibilities under the Joint Convention, including the writing of Canada's National Reports.

3.10 Import/Export

The CNSC has worked to ensure Canada's nuclear exports are used for peaceful purposes and to respect Canada's international commitments regarding non-proliferation of nuclear weapons. The *Nuclear Non-proliferation Import and Export Control Regulations* require importers and exporters to obtain and comply with licences controlling the international transfer of nuclear and nuclear related items. These regulations contain a complete list of CNSC controlled imports and exports.

In compliance with the IAEA's *Code of Conduct on the Safety and Security of Radioactive Sources*, CNSC licenses and controls the export and import of certain risk-significant radioactive sealed sources. In support of this, the CNSC has published in draft form, Regulatory Guide RD-341, *Control of the Export and Import of Risk-Significant Sealed Sources*. The CNSC has also implemented the Sealed Sources Tracking System to track the receipt, transfer, import and export of all high-risk radioactive sources throughout their lifecycle.