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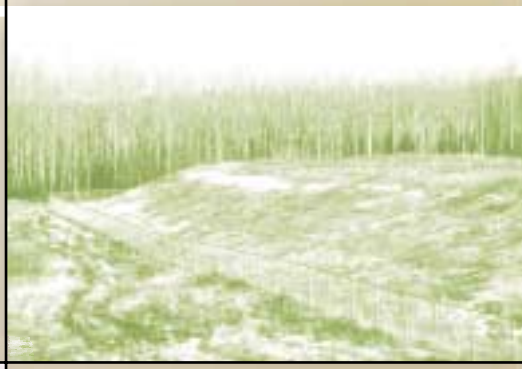
Low-Level Radioactive Waste Management Office

ANNUAL REPORT



Working Toward Community Solutions ....

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The Low-Level Radioactive Waste Management Office (LLRWMO) was established in 1982 to carry out the responsibilities of the federal government for historic low-level radioactive waste in Canada. The LLRWMO is operated by Atomic Energy of Canada Limited through a cost-recovery agreement with Natural Resources Canada, the federal department that funds and sets national policy for low-level radioactive waste management.

The mandate of the LLRWMO includes:

- resolving historic low-level radioactive waste problems that are a federal responsibility;
- establishing, as required, a user-pay service for the disposal of low-level radioactive waste produced on an ongoing basis; and
- addressing public information needs concerning low-level radioactive waste.

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Dear Sirs:

I have the honour to present to you the Annual Report of the Low-Level Radioactive Waste Management Office for the fiscal year ending March 31, 2004.

This report has been prepared in accordance with Section 5.2 of the Memorandum of Understanding between Energy, Mines and Resources Canada (now Natural Resources Canada) and Atomic Energy of Canada Limited, for the operation of the Low-Level Radioactive Waste Management Office.

Sincerely,

R. L. Zelmer, P.Eng., RPP
Director

DIRECTOR'S MESSAGE

For the Low-Level Radioactive Waste Management Office (LLRWMO), 2003-2004 will be remembered for the important milestones achieved and the longstanding historic waste issues resolved.

It was the year that the Office completed the Beacon Hill Long-Term Management Cell in Fort McMurray, Alberta to end the decade-long project to remediate the community of Fort McMurray. We were supported by the Regional Municipality of Wood Buffalo, the Northern Lights Regional Health Centre and local residents of the Waterways district. The contributions of private landowners in earlier years is also acknowledged.

It was the year that intensive community consultations and detailed scientific and engineering studies culminated in the recommendation of "qualified concepts" for the remediation, transport and long-term management of historic low-level radioactive wastes in Clarington and Port Hope. Community involvement has been a key element of the Port Hope Area Initiative, with communities playing a major role in articulating and helping to refine the concepts to undergo detailed investigations as part of the environmental assessments for the two projects.

LLRWMO Director R.L. Zelmer (left) with Port Hope Mayor R. Austin at Globe 2004.

And it was the year that the LLRWMO assisted in the remediation at Port Hope's new waterworks project through the Interim Waste Management Program, expediting the municipality's launch of a new, state-of-the-art water treatment facility. Partners in the effort included the LLRWMO, the Municipality and Cameco Corporation.

The year 2003-2004 was also one of achievement and recognition: the LLRWMO began its participation on the Urban Remediation Working Group of the Environmental Modeling for Radiation Safety Program (EMRAS) of the International Atomic Energy Agency (IAEA) at Vienna, and it began a new life as an ISO 9001-certified organization following accreditation by the Quality Management Institute. The LLRWMO was nominated for a national Globe Award for Environmental Excellence in the Brownfield Redevelopment category for its remediation of the Port Hope waterworks site and received an Award of Merit from the Consulting Engineers of Alberta for its cleanup of the Waterways site at Fort McMurray.

We are indebted to our colleagues within Atomic Energy of Canada Limited and our colleagues at Natural Resources Canada's Uranium and Radioactive Waste Division for their continued strong support, direction and participation in the ongoing work of the LLRWMO.

We look forward to continued collaboration with our partners, stakeholders and advisers as we embark on another year of waste management milestones.

R. L. Zelmer, P.Eng., RPP
Director

HISTORIC LOW-LEVEL RADIOACTIVE WASTE

In the early 1930s radium was discovered at Port Radium on Great Bear Lake in the Northwest Territories. By 1933, the Town of Port Hope, Ontario, became the site of refining operations for radium which traveled across Canada via barge, air and rail from the North. In the 1940s, uranium refining began in Port Hope and by the mid-1950s, the radium production facilities were dismantled and the Port Hope facility began producing uranium fuel for electricity generation.

As a consequence of past waste management practices, buildings and soil in and around communities associated with mining, transporting and refining radium and uranium became contaminated. When low-level radioactive contamination was discovered in the early 1970s, the federal and provincial governments immediately established a radiation reduction program to rectify the problem in Port Hope and in mining communities in Ontario and Saskatchewan.

Contamination from low-level radioactive waste was subsequently discovered along the water transportation routes originating from the Port Radium mine. Similar discoveries have been made in other Canadian communities, including Surrey, British Columbia, and Scarborough, Ontario.

Historic waste is defined as low-level radioactive waste that was managed in the past in a manner no longer considered acceptable, for which the current property owner cannot reasonably be held responsible, and for which the federal government has assumed responsibility.

There are currently about 1.5 million m^3 of historic low-level radioactive waste in Canada. While most is stored in interim waste management facilities in the Port Hope area, an estimated 100 000 m^3 is stored elsewhere in Canada. Although all historic low-level radioactive waste is believed accounted for, the discovery of other contamination sites or improved methods for delineating current sites could add to the known volume of historic low-level radioactive waste in Canada.

What is low-level radioactive waste?

In Canada, low-level radioactive waste is defined by exclusion. If a waste is radioactive, but is neither nuclear fuel waste (also called high-level waste) nor uranium mine and mill tailings, then it is classed as low-level radioactive waste. Most of Canada's low-level radioactive waste consists of soil that became contaminated over the past 70 years. Low-level radioactive waste being created today is mainly through activities relating to nuclear energy generation, nuclear research and development, and the production and use of radioisotopes in medicine, education, research, agriculture and industry.

PORT HOPE AREA INITIATIVE: INTERIM WASTE MANAGEMENT PROGRAM

BACKGROUND

Since the early 1980s the Low-Level Radioactive Waste Management Office (LLRWMO) has fulfilled the federal government's responsibility for interim management of historic low-level radioactive waste in Port Hope. The LLRWMO regularly inspects and monitors low-level radioactive waste temporarily stored at four facilities licensed by the Canadian Nuclear Safety Commission (CNSC), nine major unlicensed sites and various other properties within Port Hope.

The LLRWMO operates a Construction Monitoring Program in cooperation with the Municipality of Port Hope to prevent the spread of contaminated soil from urban development activities in that Municipality. Under this program, the LLRWMO tests the soil at proposed construction sites and transfers contaminated soils to the Pine Street Extension Temporary Storage Site. Any project requiring a building permit is automatically referred to the Construction Monitoring Program. The LLRWMO also conducts Property Compliance and Environmental Monitoring Programs as part of its Interim Waste Management activities.

2003-2004 ACTIVITIES

When a property in Port Hope changes ownership, the owner may request that the LLRWMO review its files on the property and perform a radiation survey if needed. The Office will then issue a radiological status letter outlining whether or not contamination has been found. A record number of radiological status letters was issued this year: 588 in all. Property Compliance Program activities also included the issuance of 93 radon/gamma surveys. Under the Construction Monitoring Program a total of 337 m^3 of contaminated soil was transported to the Pine Street Extension Temporary Storage Site.

A major municipal infrastructure expansion project this year consumed the bulk of the LLRWMO's Interim Waste Management resources. The project involved the Municipality of Port Hope's new state-of-the-art water treatment facility. Locating the facility adjacent to the existing plant on Lake Ontario allowed the municipality to reuse existing waterworks infrastructure, representing a significant tax saving for the community. As one of the major historic low-level radioactive waste sites requiring remediation, however, the site had to be cleaned up before the project could proceed. The LLRWMO implemented a schedule to complete site investigations, develop a site remediation plan, establish clean-up criteria and oversee clean up and remediation of the site to meet the demands of the municipality's schedule.

In the absence of a long-term low-level radioactive waste management facility, Cameco Corporation offered the use of a vacant portion of its CNSC-licensed Centre Pier property located near the project site for the contaminated soil excavated from the waterworks site.

2003-2004 Interim Waste Management Summary

PCP-originated Radon/Gamma Surveys	93
Soil Volume to the Pine Street Extension Temporary Storage Site (m^3)	337
Radiological Status Letters	588

PORT HOPE AREA INITIATIVE: INTERIM WASTE MANAGEMENT PROGRAM

The remediation project was completed in August 2003 owing to the contributions of the Municipality, local industry (Cameco) and the local conservation authority. The LLRWMO constructed a temporary storage facility for the contaminated soil, provided radiation health and safety protection services, conducted radiological monitoring, collected field samples, directed the excavation of soil during the remedial verification process and served as a point of contact for the public.

About 17 500 m^3 of marginally contaminated soil were excavated from the waterworks site and transported to the Centre Pier property temporary storage site, which was completed on August 28, 2003. An additional 8 500 m^3 of clean materials were excavated and placed into temporary storage elsewhere on the waterworks site for use as backfill.

Contaminated material will eventually be removed to a long-term waste management facility as part of the Port Hope Area Initiative (PHAI).

Although the cleaned up site was officially turned over to the Municipality in August, the LLRWMO continues to monitor groundwater in eight wells located around the new plant and collect composite samples of the surface and subsurface water collected on the site and discharged to the sanitary sewer.

Throughout the project, the LLRWMO kept the local media well informed, circulating regular updates and giving interviews that received extensive coverage in area newspapers and on radio.

Recognizing Excellence

The LLRWMO's efforts to remediate Port Hope's waterworks site were officially recognized with a nomination for a Globe Award for Environmental Excellence in the Brownfield Redevelopment category. Sponsored by the Globe Foundation and The Globe and Mail, the Globe Award for Environmental Excellence is a national award that recognizes the environmental contributions of Canadian enterprises.

PORT HOPE AREA INITIATIVE: LONG-TERM LOW-LEVEL RADIOACTIVE WASTE MANAGEMENT PROJECTS - ENVIRONMENTAL ASSESSMENT

BACKGROUND

In 2001, the Government of Canada committed $260 million to cleaning up historic wastes in the Port Hope area and managing these wastes for the long term in new facilities to be developed in the area. The Port Hope Area Initiative was launched when Natural Resources Canada (NRCan) designated the LLRWMO to undertake the work required to fulfill the federal government's obligations as set out in the legal agreement between the Government of Canada and the Municipalities of Clarington and Port Hope (formerly Port Hope and Hope Township).

The Port Hope and Port Granby Long-Term Low-Level Radioactive Waste Management projects are proceeding in three phases: environmental assessment and licensing, construction, and operation and monitoring.

The first phase of the PHAI consists of environmental assessments and regulatory approval for projects in Port Granby and Port Hope. If the resulting plans receive regulatory approval, subsequent phases will involve cleaning up the wastes and constructing new long-term management facilities to safely isolate the wastes, followed by a phase of inspection, monitoring and maintenance for the long term.

The environmental assessments for both projects were initiated in 2001. The responsible authorities for both projects are NRCan, the CNSC, and Fisheries and Oceans Canada. Local community involvement has been the defining feature of the environmental assessment process, with the communities playing a major role in providing input into the concepts outlined in the project descriptions.

Once the responsible authorities established the scope of the environmental assessments, the conduct of the environmental studies and public consultations was delegated to the LLRWMO. In response, the LLRWMO commissioned a range of studies and activities that included an evaluation of alternative means of carrying out the Port Granby and Port Hope projects.

2003-2004 ACTIVITIES

In March and April 2003, the LLRWMO conducted the third round in a series of public workshops in Clarington and Port Hope to solicit public views and obtain feedback on alternative means of conducting the projects.

The LLRWMO continued to coordinate work by a variety of specialist consultants on baseline environmental characterization studies and the preliminary framework for the Environmental Assessment Study reports. A Human Health Effects Assessment was initiated for each project, as well as a cleanup criteria report. Work also began on studies to assess the potential effects of the projects on local tourism, transportation and traffic. Specialists were engaged to assess the effect of the environment on the projects and the cumulative environmental effects of the projects in combination with other projects. Technical working sessions were held to present and discuss the details of work plans for the Aquatic, Terrestrial, Atmospheric, Groundwater and Geology and Socio-economic Environmental Baseline Studies. Similar working sessions were held on Climate Change and Cleanup Criteria. Stakeholder consultation and communications figured prominently in all processes surrounding the technical studies.

QUALIFIED CONCEPTS

In December 2003, the consulting firms charged with evaluating the various alternative means published Feasible Concepts for the Port Hope Project and Feasible Concepts for the Port Granby Project. The two reports documented how the various approaches and alternatives had been identified, including the role of public consultation, and how the evaluation methodologies had been modified in response to stakeholder comments.

The resulting feasible concepts were evaluated to arrive at a qualified concept for each of three

PORT HOPE AREA INITIATIVE: LONG-TERM LOW-LEVEL RADIOACTIVE WASTE MANAGEMENT PROJECTS - ENVIRONMENTAL ASSESSMENT

elements of the Port Hope Project and the Port Granby Project, namely excavation and construction, long-term waste management, and transportation of waste and construction materials. The final reports, Qualified Concept for the Port Hope Project and Qualified Concept for the Port Granby Project, documented the process by which the feasible concepts were compared. The two reports presented the results of the comparative evaluation of the feasible concepts based on technical, health and safety, community, economic, and environmental indicators, and identified the preferred qualified concept for each project.

The recommended approach in Port Hope was to consolidate all the Port Hope historic low-level radioactive waste in one new facility at the site currently occupied by the Welcome Waste Management Facility and adjacent auto recycling operation.

In Clarington, site of the Port Granby Project, the recommended approach was to remove the waste from its current location on the shores of Lake Ontario to a new facility on an available neighbouring site away from the lake.

SEEKING PUBLIC RESPONSE

On February 9 and 10, 2004, years of scientific study and public feedback culminated in the presentation of the qualified concepts to the Clarington and Port Hope municipal councils.

The presentations received extensive media coverage, including newspaper, television and radio interviews relating to the qualified concepts. Both municipal councils referred the reports to their peer review teams for independent analysis.

In February 2004, the LLRWMO embarked on an extensive communications and consultation program with community residents and groups to elicit feedback on the qualified concepts. The qualified concept reports and recommendations were made available to the public in print and CD-ROM format through the main street Port Hope Project Information Exchange and local libraries.

A community information office was opened in Newcastle Village in the Municipality of Clarington. Open houses were scheduled at various locations throughout the Municipalities of Clarington and Port Hope for March and April 2004, and speaking engagements took place with local service clubs, school groups and community organizations. The LLRWMO also communicated and consulted extensively with representatives of federal, provincial and local governments and agencies.

PORT HOPE AREA INITIATIVE: COMMUNICATION AND INFORMATION INITIATIVES

BACKGROUND

The LLRWMO puts emphasis on its responsibility for communicating with stakeholders and the public about local remediation projects undertaken as part of the PHAI. The LLRWMO's consultation and public information program addresses public concerns, provides community access to information and resources, and provides balanced and objective information on activities and projects to residents and other stakeholders.

2003-2004 ACTIVITIES

In April 2003, the LLRWMO held a technical working session on aquatic and terrestrial components of the PHAI environmental assessment in Port Hope. Similar sessions were held on Atmospheric, Geology and Groundwater, Climate Change and Socioeconomic Environmental Baseline Studies and Cleanup Criteria. These discussions provided an opportunity to share progress on the studies, provide comments and identify possible information gaps.

PORT HOPE AREA INITIATIVE: COMMUNICATION AND INFORMATION INITIATIVES

Later in the year, the LLRWMO hosted Expo '03, a major exhibition that attracted more than 600 people. Among the exhibitors and other participants were NRCan, Fisheries and Oceans Canada, the CNSC, Cameco Corporation, Durham Nuclear Health Committee, South East Clarington Ratepayers Association and Port Hope Nuclear Environmental Watchdogs.

A public attitude survey of 600 residents in Port Hope and the Port Granby area of Clarington found that local area residents were more aware of the LLRWMO and the Port Hope Area Initiative than they had been a year ago.

Other PHAI-related communication activities included information presentations to community groups (school parent councils, service clubs, students etc.), elected representatives (Members of Parliament, municipal councillors), and regular project updates to the Durham Nuclear Health Committee. Tours of the Port Granby and Port Hope waste management facilities were also provided for local residents and community groups.

PORT HOPE AREA INITIATIVE: PROPERTY VALUE PROTECTION PROGRAM

BACKGROUND

The Property Value Protection (PVP) Program is an integral component of the Port Hope Area Initiative (PHAI). It reflects the commitment of the municipal councils of Port Hope and Clarington and the Government of Canada to address potential interim economic effects that may arise from the Initiative. The program was established under the Legal Agreement of March 2001 to mitigate financial losses experienced by owners of residential, commercial or industrial properties in designated parts of Port Hope and Clarington. The PVP Program is designed to compensate owners of property who realize less than full market value at the time of sale, rental or mortgage renewal as a result of the Initiative. Its key features include a claim process, an appeal process and the appointment of independent compensation officers to hear appeals.

2003-2004 ACTIVITIES

The PVP program continued to provide information to the community and to support area real estate professionals in informing sellers and prospective buyers about the PHAI. The LLRWMO produced a brochure specifically targeting newcomers to assist realtors selling properties in the Port Granby area of Clarington. A similar brochure is used extensively by realtors in Port Hope.

Program staff seized many opportunities to raise awareness about the program, participating in the Port Hope Fall Fair, local trade shows and project open houses, and giving presentations to the Cobourg-Port Hope and Durham real estate boards and community groups.

The program has been instrumental in facilitating the use of market value appraisers for properties valued at less than $250 000 to supplement a pool of certified appraisers. With the permission of the Chief Appraiser of Canada and the cooperation of the Cobourg-Port Hope Real Estate Board and the Ontario Real Estate Association, the local board has established a certification program for market value appraisers.

PORT HOPE AREA INITIATIVE: PROPERTY VALUE PROTECTION PROGRAM

The first appeal of a claim decision under the program's appeal process was filed this year. A mediation hearing conducted in February 2004 found in favour of the claimant.

There was an increase in inquiries from local property owners following the announcement of the recommended concepts for the long-term waste management facilities and transportation routes in February 2004.

The PVP Program appears to be giving property owners confidence that their real estate investments will be protected from potential project effects. Information gathered from the real estate and financial communities indicates that the program has had a stabilizing effect on the real estate market.

NORTHERN TRANSPORTATION ROUTE

BACKGROUND

In the early 1990s, the LLRWMO identified 20 contaminated sites along the 2 200-km route used to ship uranium and radium ores and concentrates from the Northwest Territories to Alberta until the late 1950s. It identified more than 47 000 m^3 of uranium-contaminated soil and removed small amounts of uranium ore and concentrates to prevent radiation exposure. In one instance, the LLRWMO removed about 200 m^3 of contaminated soil to a local temporary storage site.

Work in 2001-2002 characterized and remediated some of the historic waste sites along the Northern Transportation Route. Affected Northwest Territories communities include Fort Smith, Fort Fitzgerald, Tulita and Hay River.

2003-2004 ACTIVITIES

In October 2003, the LLRWMO conducted inspections at temporary storage mounds in Tulita and Fort Smith, Northwest Territories, and inspected the recently completed Waterways Project in Fort McMurray, Alberta. LLRWMO staff also supervised remedial work to decontaminate two barges in Hay River, and installed an intrusion blanket to stabilize contained material in Fort Fitzgerald.

SCARBOROUGH (MALVERN)

BACKGROUND

In 1980, radium-contaminated soil was discovered at the site of a former farm where radium-contaminated scrap materials from a luminescent dial operation had been processed and incinerated. The site, which is now part of the urban community of Malvern in Scarborough, Ontario, was the subject of a full-scale cleanup in 1996, including the construction of an engineered storage mound.

2003-2004 ACTIVITIES

The LLRWMO continued its inspection and monitoring program at the Passmore Avenue Temporary Storage Site, where it conducts regular physical inspections, tests groundwater and monitors for gamma radiation and radon gas. These inspections continue to indicate that there are no adverse effects on the environment around the sites. The annual monitoring report was forwarded to the City of Toronto and made publicly available through the Malvern Public Library.

FORT MCMURRAY

BACKGROUND

From the 1930s until the late 1950s, Eldorado Nuclear Ltd. transported uranium and radium ore by barge from its Port Radium mine on Great Bear Lake, Northwest Territories, via a system of lakes and rivers to docking sites at Waterways (now Fort McMurray), Alberta, for shipment by rail to its refinery in Port Hope, Ontario. Accidental spillage of some materials, primarily at the transfer points, resulted in contamination at several sites.

In December 1992, the LLRWMO began investigating sections of this 2 200-km water transport route and discovered elevated levels of radioactivity at several sites. Uranium-contaminated soil and building materials were found at an unused warehouse in Fort McMurray and at eight other sites, including the Waterways site, 2 km upstream on the Clearwater River.

Between 1993 and 1996, the LLRWMO excavated and removed about 31 000 m^3 of mildly contaminated soil from eight riverside properties. Soils and materials with concentrations of more than 500 ppm uranium were shipped in steel drums to Chalk River, Ontario. Less contaminated soils and materials - those containing fewer than 500 ppm uranium - were shipped by truck to an engineered aboveground facility designed and built by the LLRWMO at the Beacon Hill Sanitary Landfill in Fort McMurray.

The cleanup of the last Fort McMurray site began in the fall of 2002, following two rounds of public information sessions and the completion of an assessment of environmental effects in May 2002. About 12 500 m^3 of uranium-contaminated soil were removed and transferred to the long-term management facility in 2002, but the LLRWMO was unable to fully restore the Waterways property or complete the final closeout and cover installation at the facility before winter. Work began anew in the spring of 2003.

Recognizing Merit

In February 2004, the Fort McMurray Waterways Project received an Award of Merit from the Consulting Engineers of Alberta. The award recognizes the work done in remediating the Waterways Site and returning the land to productive use and future enjoyment. Both the LLRWMO and AMEC Earth and Environmental Limited, the project engineers, were recognized.

2003-2004 ACTIVITIES

The Fort McMurray Waterways Project was completed in the summer of 2003 with seeding of the topsoil cover at both the remediation site and the management cell and the installation of a perimeter fence around the management cell.

The closure marked the resolution of a decade-long endeavour to clean up and safely manage about 43 500 m^3 of marginally contaminated soil from several sites in this northern Alberta city. The Regional Municipality of Wood Buffalo, the Northern Lights Regional Health Centre and local residents of Fort McMurray's Waterways district were strong supporters of this project. The Waterways property is now part of Fort McMurray's public park and trail system.

The LLRWMO will continue to monitor and maintain the long term management cell.

OTHER HISTORIC WASTE PROGRAM ACTIVITIES

2003–2004 ACTIVITIES

The LLRWMO continued to respond to requests for the disposal of radium dial artifacts, which it collected and transported to the LLRWMO storage building at the Chalk River Laboratories.

CNSC Licences Held by the LLRWMO

The LLRWMO currently holds five licences issued by the Canadian Nuclear Safety Commission for various operations and facilities. The following table summarizes the licensing obligations of the LLRWMO.

Facility*	Licence Number and Type	Description	Expiration Date
Port Hope Field Services Office Laboratory	20004-7-06.0 Nuclear Substances and Radiation Devices Licence	Licence for the LLRWMO laboratory in Port Hope, Ontario	2006 Sep 30
Pine Street Extension Temporary Storage Site	WNSL-W1-182.0/2006, Waste Nuclear Substance Licence	Licence for the Pine Street Extension Temporary Storage Site in Port Hope, Ontario	2006 Dec 31
Port Hope Waste Management Facility	WNSL-W1-344-1.2/ind, Waste Nuclear Substance Licence	Licence for the Pine Street Extension Consolidation Site, Strachan Street Consolidation Site and Sewage Treatment Plant Temporary Storage Site in Port Hope, Ontario	indefinite from date of issue (2000 Jun 22)
Prescribed Substances at Unspecified Locations	WNSL-W1-202.0/2006, Waste Nuclear Substance Licence	Historic low-level radioactive waste management at Canadian sites	2006 Nov 30
X-Ray Fluorescence Analysis	20004-15-04.0 Nuclear Substances and Radiation Devices Licence	Licence issues for X-ray fluorescence analyzer used or stored at the LLRWMO Field Services Office laboratory in Port Hope, Ontario	2004 Apr 30

* A further four unlicensed low-level radioactive waste storage mounds are also under LLRWMO oversight. These are Lakeshore Road Storage Mound and Passmore Avenue Interim Storage Mound, both in Toronto; the Fort McMurray Long-Term Management Facility in Fort McMurray, Alberta; and two Northwest Territories mounds-the Fort Smith Interim Storage Mound and the Tulita Interim Storage Mound.

Ongoing Waste Program

Low-level radioactive waste continues to be generated by electrical utilities, nuclear research organizations, nuclear fuel manufacturers, and the producers and users of medical and other radioisotopes. These producers are responsible for the wastes they produce. The annual accumulation of such wastes in Canada is about 4 000 m^3.

NRCan often requests technical input from the LLRWMO when the Department develops policies and strategies for the long-term management of this ongoing waste. The LLRWMO also assists NRCan, on request, in activities with international organizations such as the International Atomic Energy Agency (IAEA) and the Nuclear Energy Agency of the Organization for Economic Cooperation and Development.

In September 2003, the LLRWMO participated in the new IAEA program on Environmental Modelling for Radiation Safety (EMRAS), which began recently in Vienna. The Office is Canada's delegate to the Urban Working Group, which is looking at remediation assessment for urban areas contaminated with dispersed radionuclides.

ISO Certification

In October 2003, the LLRWMO was audited by the Quality Management Institute as part of a wider audit process prompted by AECL's request for global registration under the ISO 9001:2000 standard. ISO 9000 is a family of standards and guidelines relating to management systems, primarily for quality management - how an organization ensures that its products and services satisfy its customers' quality requirements and how it complies with applicable regulations.

LLRWMO received ISO 9001:2000 certification on November 21, 2003. The scope of the registration includes:

- *the management of historic low-level radioactive wastes and the resolution of related issues on behalf of the federal government;*
- *the assessment of low-level radioactive wastes produced by the nuclear industry and medical, industrial and research institutions;*
- *the establishment of a user-pay service for disposal of ongoing low-level radioactive waste;*
- *tracking and reporting on national and international developments pertaining to low-level radioactive waste; and*
- *providing Canadians with appropriate information on low-level radioactive waste and related issues.*

Information Program

The LLRWMO provides information about low-level radioactive waste and its management and disposal in Canada. Its national office in Ottawa and field offices in Port Hope respond to daily public inquiries by phone, letter, e-mail and in person. In February 2004, the LLRWMO opened an information office in Newcastle Village, Ontario. This is a companion office to the Public Information Exchange office established in Port Hope in 2001.

LLRWMO staff gave two presentations at the Ninth International Conference on Environmental Remediation and Radioactive Waste Management, held in Oxford, England, in August 2003.

The LLRWMO's popular Web site received well over 16 000 visits in 2003-2004.

Financial Review

LLRWMO operations are funded by NRCan through a cost recovery agreement (Memorandum of Understanding) with AECL. The LLRWMO's accounts and financial control systems conform to those of AECL.

Prior to the start of each fiscal year, the LLRWMO submits a business plan to NRCan for approval. The plan describes how the LLRWMO intends to carry out NRCan's priorities with the available funding. Each quarter, LLRWMO staff and representatives from NRCan's Uranium and Radioactive Waste Division review and adjust the plan as necessary.

The financial statements in this annual report detail the LLRWMO's operating costs for the fiscal year ending March 31, 2004. The table illustrates how funding provided by NRCan was allocated to the LLRWMO's mandated business lines in 2002-2003 and 2003-2004.

Financial Review

	Total Expenditure ($ thousands)	
Program Areas	2002–2003	2003–2004
HISTORIC WASTE PROGRAM		
Port Hope Area Initiative		
Port Hope Area – Long Term Storage Project	6 257	7 558*
Port Hope Area – Property Value Protection Program	321	198
Port Hope Interim Waste Management	627	1 593
Subtotal: Port Hope Area Initiative	**7 205**	**9 349**
Northern Sites Initiative		
Fort McMurray	1 178	718
Northern Transportation Route	55	56
Subtotal: Northern Sites Initiative	**1 233**	**774**
Other Historic Waste Initiative		
Scarborough (Malvern)	29	25
Historic Waste at Other Locations	47	53
Subtotal: Other Historic Waste Initiative	**76**	**78**
Other Mandated Activities		
Ongoing Waste Program	14	69
Information Program	54	121
Year-End Credits:		
Payroll Variance Credit	(34)	0*
Subtotal: Other Mandated Activities	**34**	**0**
Less Cost Recovery from Ontario Scarborough (Malvern)	(28)	(25)
TOTAL EXPENDITURES FOR NRCAN FUNDING	**8 520**	**10 366**

* *Payroll variance credit is now reported under Port Hope Area - Long Term Storage Project (Initiative Support).*

Audit Statement

Atomic Energy of Canada Limited (AECL) is audited annually by the Office of the Auditor General of Canada and Ernst & Young. The audit is conducted in accordance with generally accepted auditing standards. The review of the LLRWMO's financial statements falls within the scope of that audit and the opinions expressed in the AECL audit report are equally applicable to the LLRWMO's financial results.