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NEWS

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NWMO Establishes Youth Round Table

The Nuclear Waste Management Organization (NWMO) has established a youth round table to provide recommendations on effective ways to engage youth.

"The NWMO recognizes that its work will span several generations," said Round Table coordinator Elena Mantagaris. "Youth voices must be heard today since their values and priorities will inform future decisions regarding the development of a deep geologic repository for the long-term management of used nuclear fuel," she added.

Young people between the ages of 18 and 25 years were recruited from the four provinces associated with the nuclear fuel cycle: Ontario, Québec, New Brunswick and Saskatchewan. They represent a diversity of views, cultural perspectives and socio-economic backgrounds. Through a series of online and in-person meetings, the NWMO Youth Round Table will recommend effective communications vehicles, approaches and messages that are expected to raise youth awareness of the NWMO and help spur youth dialogue on this important national infrastructure initiative.

The Youth Round Table will present its recommendations to the NWMO Advisory Council on May 27, 2009.



BACK ROW » Eric Sykes (NWMO), Michael Borrelli (NWMO), Kevin Beattie, Guy Marsan, David Ruta, Maximilien Roy, Robert Simms, Jessica Millar (NWMO), Jarret Leaman, Jessey Pacho, Jennifer Hayward, Daniel King, Joanna Dafoe
FRONT ROW » Wendy Yan (NWMO), Elena Mantagaris (NWMO), Kiana Eastmond, Pam Rice, Chelsea Ferris, Marissa Evers, Khaled Haggag, Diane Adams.

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New NWMO Sponsorship YSF to Field Larger Team Canada-MILSET

A significant new sponsorship from the NWMO to Youth Science Foundation (YSF) Canada will help 44 students from Ontario, Québec, New Brunswick and Saskatchewan participate in the 2009 Team Canada-MILSET (Mouvement International pour le Loisir Scientifique et Technique – the International Movement for Leisure Activities in Science and Technology) Expo-Sciences International (ESI) in Tunisia July 23-29, 2009. Held every two years, this non-competitive event brings together young people from over 75 countries to exchange ideas and compare projects, and aims to instil a culture of science by fostering networking and international collaboration.

The NWMO's investment, together with funding from the Province of Ontario, Hydro-Québec and the Canadian Commission for UNESCO, will allow YSF Canada to field a much larger team and to expand its participation. For the first time, Saskatchewan, Ontario and New Brunswick will select students from their Canada-Wide Science Fair teams.

"As an organization with a strong science and public engagement program, the NWMO is committed to intergenerational learning," said Ken Nash, NWMO's President and CEO. "We support youth efforts to advance scientific knowledge and help apply it in a way that matters to people."

2007 Team Canada-MILSET ESI participant Haley Robinson, who travelled to Durban, South Africa, knows the value of this rare opportunity. "I do not think anything can reproduce this first-hand experience. The people I talked to, the sights I saw and the connections I made, have all contributed to my development."

NWMO Releases New Five-Year Implementation Plan

Last year, the Nuclear Waste Management Organization (NWMO) published its first five-year plan describing how it will implement Adaptive Phased Management, Canada's plan for the safe long-term care of used nuclear fuel. In January 2009, the organization released *Implementing Adaptive Phased Management 2009 to 2013*, the annual update to the Plan.

The Plan provides an overview of the NWMO and Adaptive Phased Management and presents highlights of the organization's objectives and directions for the planning period. It describes how the NWMO will continue to build a sustainable implementing organization and lead a robust technical and social research program. The Plan highlights the collaborative design of the process to guide decisions on where to contain and isolate Canada's used nuclear fuel for the long term, and underscores the organization's commitment to engage Canadians meaningfully in all our activities.



The Plan is a living document that will be regularly assessed, strengthened and redirected in the face of new information, advances in technology and science, changes in societal values and evolving public policy. The NWMO's progress in 2009 will be described in the 2009 Annual Report, to be published in March 2010.

For a copy of the Plan, please visit www.nwmo.ca/implementationplan.

Annual Report 2008

The NWMO Annual Report for 2008, *Moving Forward Together*, was published in March and can be viewed on our website at www.nwmo.ca/annualreport.

In 2008, we continued to further our relationships and build new ones with individuals, organizations and Aboriginal people with an interest in our work. The NWMO also increased significantly its staffing levels to respond to an expanded work program and to support its transition in 2009 to becoming its own employer with all the necessary infrastructure and processes. Over the course of the past year, we also began the collaborative development with Canadians of a site selection process for a deep geological repository.



www.nwmo.ca

Advancing Technical R&D

As the Nuclear Waste Management Organization (NWMO) moves forward with the collaborative design of a siting process for a deep geological repository, its technical team is continuing to build the organization's knowledge base.

A state-of-understanding review report on the effects of hydrogen gas on suppressing used fuel dissolution in a deep geological repository has been completed. Significant additional data were obtained on iodine transfer factors in a variety of plant and animal species, with emphasis on agricultural pathways, but also some tundra species (e.g. caribou, moose, elk) relevant to the hunter/gatherer critical group. And our annual watching brief on reprocessing, partitioning and transmutation, and alternative waste management technology has been completed and posted on the NWMO website.

The NWMO technical team continues to support the organization's engagement activities by providing technical presentations and support on an ongoing basis. For example, on November 6, 2008, technical staff attended the Federal-Provincial-Territorial Radiation Protection Committee Workshop in Ottawa. They also participated in the NWMO dialogue with the Canadian Association of Nuclear Host Communities (CANHC) in Richmond Hill on November 26, as well as the Municipal Forum in Toronto on December 8.

On the international front, the NWMO keeps abreast of new developments. Technical staff attended the International Atomic Energy Agency (IAEA) training course on Repository Development held in Las Vegas on November 13-14, 2008, and participated via teleconference in the Nuclear Energy Agency (NEA) Reversibility and Retrievability Core Group Meeting held in Paris on November 17. An international co-operative project for monitoring the Underground Research Laboratory (URL) shaft seal with Atomic Energy of Canada Limited (AECL), SKB (Sweden), Posiva (Finland) and Andra (France) was launched in December. As well, NWMO staff attended the Mont Terri Project Meeting in St-Ursanne, Switzerland, on February 18-19, 2009.

ITRG

An Independent Technical Review Group (ITRG) was established by the NWMO Board of Directors in 2008 to provide an independent review and assessment of NWMO's technical research and development program. Comprised of internationally recognized experts in nuclear waste repository technology, the ITRG held its inaugural meeting at the NWMO offices in Toronto in September, and in November presented its findings to the NWMO Board of Directors and Advisory Council.

Several of the ITRG recommendations suggested additional research work in several program areas and the need to build up the level of NWMO staffing resources to implement Adaptive Phased Management. While the ITRG recognized the co-operative work of the NWMO with other national and international radioactive waste management organizations, it strongly recommended expanded in-house resources in core capability functions.

The NWMO has reviewed and accepted the ITRG recommendations. In all cases, work has been initiated or plans have been defined to initiate work to address these recommendations. Please visit the NWMO website at www.nwmo.ca/itrg for more details on the ITRG.



FROM LEFT » Introductory field campaign to the Greenland Ice Sheet (photo: Monique Hobbs); Monique Hobbs from the NWMO analyzing surface waters near Kangerlussuaq, Greenland (photo: Emily Henkemans); Greenland Ice Sheet terminus, near Kangerlussuaq, Greenland (Photo: Monique Hobbs)

Greenland Ice Sheet Hydrology Project

Glaciation has been identified as the most intense climate change process relevant to the long-term performance of a deep geological repository in northern latitudes. In 2008, the NWMO established, in collaboration with waste management organizations from Sweden and Finland, the Greenland Ice Sheet Hydrology Project to improve scientific understanding of the effects of a continental-scale ice sheet on groundwater flow and chemical compositions at potential repository depths. NWMO staff participated in a field campaign in June 2008 in Kangerlussuaq, Greenland, which included the collection of baseline information on the geological setting and sampling of surface waters for laboratory analysis.

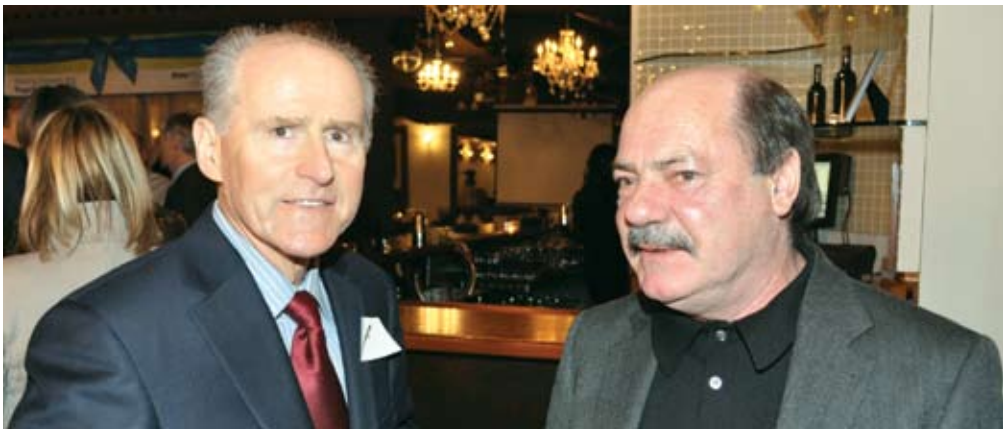
2009 Marks New NWMO

It was an afternoon of celebration on February 4 at the Rosehill Venue Lounge, Toronto, as NWMO staff and special guests toasted the new debut of the organization.

Effective January 1, 2009, the Nuclear Waste Management Organization (NWMO) became its own employer with supporting infrastructure. Having grown from a small study-based organization established in 2002 to a sustainable corporation with full responsibility to implement Adaptive Phased Management (APM), the NWMO now counts approximately 80 employees and is growing.

The move enhances NWMO's long-term viability and improves its capacity to recruit and retain personnel. Part of an agreement between the NWMO and Ontario Power Generation (OPG) was to transfer to the NWMO all the OPG personnel who had been working on both NWMO programs and the deep geologic repository for OPG's low and intermediate level waste. This transfer agreement significantly benefits the NWMO not only in terms of acquiring the experience base of an established nuclear waste management and repository team, but also by having entered into a services agreement with OPG to develop and license the electricity generating company's proposed repository project for low and intermediate level waste in Kincardine, Ontario.

With first-hand experience to be gained in various areas including relationship-building with a host community and licensing a repository through the regulatory system, as well as design, development, safety assessment, environmental assessment and construction of a deep repository, the NWMO will be able to increase its organizational capacity to implement APM.



ABOVE ❯❯ NWMO Board of Directors Chairman, Gary Kugler and Communications Manager, Michael Krizanc



RIGHT ❯❯ NWMO President and CEO, Ken Nash and OPG VP Nuclear Waste Operations, Keith Mombourquette

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NUCLEAR WASTE MANAGEMENT ORGANIZATION
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