Volume 7, Issue 2
August 2009

nwmo NEWS

Invitation to Review a Proposed Process for Selecting a Site

On May 5, 2009, the Nuclear Waste Management Organization (NWMO) published a *Proposed Process for Selecting a Site*. We invite Canadians to share their thoughts on whether the proposed process is appropriate and what changes, if any, need to be made.

The proposed process was designed to be responsive to input and direction received through engagement in 2008. Interested organizations and individuals were asked what were the important principles and elements that should be incorporated in a fair process to identify an informed and willing community to host facilities for the long-term management of Canada's used nuclear fuel.

The $16 – $24 billion national infrastructure project involves the creation of a deep geological repository and centre of expertise, with site selection guided by rigorous scientific and technical requirements. The project will be implemented through a long-term partnership between the NWMO and an informed and willing community. It will be implemented in a way that helps foster the well-being and sustainability of the host community. Construction of the facility will proceed only after the NWMO demonstrates that all safety, health and environmental protection standards set by regulatory authorities can be met or exceeded.

During the months of May and June 2009, the NWMO held public information sessions in Ontario, Québec and New Brunswick to hear the questions, concerns and suggested improvements to the proposed process. These comments will be used, along with direction received from other engagement initiatives, to refine the proposed process before launching the siting process. In all, the NWMO visited 14 regional centres across the three provinces. The information sessions were in an open-house format with poster boards displaying background information on the NWMO and its work so far, as well as key components of the proposed process. Attendees were encouraged to speak with NWMO staff to share their questions and concerns, watch a video outlining NWMO's work and the proposed siting process, and pick up fact sheets and backgrounders on topics of interest.

To review the *Proposed Process for Selecting a Site*, please visit our website at www.nwmo.ca. You can also contact the NWMO to request a copy of the document. We look forward to hearing from you.





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The work continues...

Youth Roundtable Presents Recommendations to NWMO

Having completed its formal mandate, the NWMO Youth Roundtable presented its recommendations on youth engagement to the NWMO Advisory Council meeting on May 27, 2009.

The NWMO sought recommendations on how to make the issue of used nuclear fuel resonate among youth and also build awareness of the mandate of the organization. The NWMO also wanted to know how to build interest and understanding among young people on Canada's approach for the long-term management of used nuclear fuel, as well as how to facilitate the participation of youth in the dialogues and decision-making processes.

The Youth Roundtable comprises 16 participants between 18 and 25 years old from the four nuclear provinces (New Brunswick, Ontario, Québec and Saskatchewan). They are a culturally diverse group with a mixture of male and female representatives coming from urban and rural areas. The group consists of individuals at different life stages (i.e. in high school, in university, employed and have a young family), with a broad range of interests from scientific and technical disciplines to ethics, public policy, social sciences and community involvement.

The recommendations provided by the Youth Roundtable address key messages, communications channels, and engaging youth in the community and educational institutions.

The NWMO is currently developing an implementation plan in response to the recommendations made and considering opportunities for further input from the Youth Roundtable in the design, review and implementation of future engagement initiatives.

Team NWMO in Greater Number on Race Day for the YMCA

For the second year in a row, NWMO staff entered the YMCA Corporate Team Challenge held on May 27, 2009, at Exhibition Place. Last year, the NWMO entered one running team, but for this 29th annual event we had four running and two walking teams. Our 24 staff members raised a total of $2,025 in pledges to support the YMCA Strong Kids Campaign.



Draft Aboriginal Policy – Invitation to Comment

Since the beginning of the NWMO's work in 2002, the interests and concerns of Aboriginal peoples have been an integral part of our considerations. This began as we conducted the study on options for the long-term management of Canada's used nuclear fuel and has continued through the development of all our implementation plans for Adaptive Phased Management.

As our work progresses, we wish to ensure active and meaningful participation with Aboriginal peoples.

We have developed a Draft Aboriginal Policy to guide our work.

The development of this Policy has benefited from advice from the NWMO Elders Forum, the NWMO Aboriginal Working Group Niigani, and through our relationships with Aboriginal organizations at the national, provincial and regional levels.

A working draft of the policy is on the NWMO's website, and we invite you to provide your comments.

Please submit comments to the attention of Pat Patton, Director of Aboriginal Relations, NWMO.

www.nwmo.ca

Advancing Technical R&D

To support its five-year business plan, the NWMO prepared the Adaptive Phased Management (APM) technical program activities for the period 2010-2014. The APM technical program is supporting the implementation of APM in three broad areas of study: to improve our ability to prepare for and provide technical support to the siting process; to develop conceptual engineering designs and cost estimates; and to prepare illustrative safety assessments for the long-term management of Canada's used nuclear fuel. Several technical reports were also completed, including the 2008 Technical Annual Report, as well as a report on Canadian and international experience on transportation of hazardous waste and used nuclear fuel. The NWMO reviewed five proposals to update the APM conceptual design and cost estimate for a repository in crystalline rock and in sedimentary rock. An 18-month contract to complete the update was issued in June 2009.

On April 7, 2009, the NWMO met with the Canadian Nuclear Safety Commission (CNSC) President Dr. Michael Binder to further discuss the CNSC's role in the pre-licensing of APM. The CNSC will be reviewing and providing comment on the NWMO's draft site selection process, the APM conceptual design reports and the APM safety assessment reports when they are completed. The CNSC will also be taking part in the NWMO's engagement activities, i.e. Citizen Dialogues, in Fall 2009.

NWMO technical staff gave a technical presentation to the Durham Nuclear Health Committee in Oshawa on April 17, and also participated in information sessions held for the launch of the NWMO's draft site selection process.

In 2008, an Independent Technical Review Group (ITRG) was established by the NWMO Board of Directors to independently review and assess the NWMO's technical R&D program. This year, the NWMO issued a response and action plan to the 2008 Report of the ITRG. A draft Research, Development and Demonstration Report 2010 is also underway to provide a rationale for the NWMO's technical program activities.

The NWMO continues to keep abreast of R&D being conducted in other countries as international co-operation is key to the advancement of its technical work programs. NWMO staff attended the International Spent Fuel Workshop held in Toronto on May 7-8, 2009; the Äspö Hard Rock Laboratory 16th Technical Evaluation Forum in Stockholm, Sweden, on May 27-28; the International Joint Committee Meeting in Stockholm, Sweden, on May 29; and the Nuclear Energy Agency Reversibility and Retrievability Project Meeting in Paris, France, on June 3-5.

Site for Used Fuel Management Selected in Sweden

The Swedish Nuclear Fuel and Waste Management Company, SKB, announced on June 3, 2009, that it has selected Forsmark in the municipality of Östhammar as the site to construct a repository for Sweden's used nuclear fuel. The other site undergoing detailed characterization and evaluation was Laxemar in the municipality of Oskarshamn.

The site selection is the result of 20 years of work, where SKB conducted surveys across Sweden and feasibility studies in eight municipalities, followed by detailed site investigations in Forsmark and Oskarshamn between 2002 and 2007.

The repository for used nuclear fuel would be at a depth of about 500 metres in crystalline rock. The Forsmark site has fewer fractures and other features that would improve long-term safety of the repository compared with Laxemar. The site in Forsmark would also require less space, and thus facilitates construction with less rock to be excavated and less material needed for backfilling.

To minimize the impact on the environment, surface facilities will be constructed in the existing industrial area, whereby benefitting from the infrastructure of the area. The municipality of Oskarshamn will still be participating in the project as the interim storage for used nuclear fuel is found there, as will be the encapsulation plant.

SKB will submit its licence application in 2010, as well as an environmental impact assessment and a safety analysis for a repository in Forsmark.

NWMO/NSERC Industrial Postgraduate Scholarship

The NWMO is pleased to announce that Mike Makahnouk, a Ph.D. candidate at the University of Waterloo under the supervision of Dr. Shaun Frape, has been awarded a three-year National Sciences and Engineering Research Council of Canada (NSERC) Industrial Postgraduate Scholarship, which is funded jointly by the NMWO and NSERC. Mr. Makahnouk's Ph.D. thesis involves field and analytical work to increase knowledge of the geochemical processes associated with glacial cycles and their impact on the long-term performance of a deep geological repository for used nuclear fuel. The work will be conducted as part of the Greenland Analogue Project being carried out by the NWMO in collaboration with SKB (Sweden) and Posiva (Finland).



RIGHT ❯❯ NWMO/NSERC Industrial Postgraduate Scholarship winner Mike Makahnouk conducting fieldwork on the Leverett Glacier in Greenland (July 2009).

2009 Geoscience Seminar



BELOW ❯❯ Participants from Canada, USA and Switzerland gathered for the 7th annual seminar on June 9-10, 2009, at the Hockley Valley Resort in Orangeville, Ontario, to discuss topics on geoscience.

The NWMO's 7th Annual Geoscience Seminar welcomed over 50 Canadian and international participants from universities, research organizations and consulting firms over the course of two days on June 9-10 at the Hockley Valley Resort in Orangeville, Ontario. The program included 23 presentations, focusing on results from the NWMO geoscience work programs on the development of site characterization tools and methods, and long-term geosphere evolution.

Topics addressed included long-term climate change, radionuclide transport processes, seismology, geosphere evolution, and techniques for matrix pore water extraction and analysis. The seminar brought together the different areas of expertise of the participants and provided directions for future work to address some of these challenging topics.

Seminar participant Dr. Tom Al from the University of New Brunswick noted that "the meeting provides a welcomed and necessary opportunity for the researchers involved in the program to stay up to date with the results being obtained by the entire program, thereby enabling efficient integration of the individual group efforts. In addition, the international perspective provided by the American and European contributors is valuable in that it allows us to gauge our results against others. Of course, as is always the case at scientific meetings, the informal discussion that is prompted by sharing of data is extremely valuable for maintaining a broad and objective approach to the research."

Dr. Martin Mazurek from the University of Bern, Switzerland, found the NWMO Geoscience Seminar to be "a good mixture of overview/strategic presentations and high-quality technical presentations," including NWMO Director of Social Research and Dialogue Jo-Ann Facella's presentation on the proposed siting process, and also the presentation of the Greenland Analogue Project, which is "well-focused on questions relevant to a safety case." Dr. Mazurek also gave particular mention to the NWMO's participation in international initiatives such as Äspö, Mont Terri and the Greenland Analogue Project, which were presented at the seminar.

Moving Forward Together: Designing the Process for Selecting a Site

The Nuclear Waste Management Organization has produced a new DVD, entitled *Moving Forward Together: Designing the Process for Selecting a Site*, in support of our dialogue to collaboratively design a process for selecting a site for a deep geological repository.

To receive your copy of the DVD, please call 1.866.249.6966 or email us at contactus@nwmo.ca.



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