

**NUCLEAR WASTE MANAGEMENT ORGANIZATION (NWMO)**

**BOARD OF DIRECTORS  
MEETING**

**February 28, 2013**

**AGENDA**

1. Constitution of Meeting and Approval of Agenda
2. Minutes of Previous Meeting
3. Business Arising from the Previous Minutes
4. *In Camera* Session
5. Report from the Siting Committee
6. Report from the Audit, Finance & Risk Committee
7. Report from the Advisory Council
8. President's Report
9. Update on APM Siting Process
10. Disposition of Advisory Council Advice
11. Developments Over the Past Year
12. Disposition of Independent Technical Review Group Recommendations
13. Submission of the Pre-project Report on Repository Design and Safety in Crystalline Rock to the Canadian Nuclear Safety Commission
14. Potential DGR Cost Savings Arising from an Optimized Repository Container Design
15. Outline Plan for APM DGR Design Development and Proof Testing
16. Business Risk
17. Compliance with Occupational Health and Safety and Environmental Policies
18. *In Camera* Session
19. Update on OPG L&ILW DGR
20. Legal / Corporate Secretary Report
21. Next Meeting of the Board
22. *In Camera* Session

Conclusion of Meeting

**MINUTES**  
**OF THE MEETING**  
**OF THE BOARD OF DIRECTORS OF THE**  
**NUCLEAR WASTE MANAGEMENT ORGANIZATION (NWMO) /**  
**SOCIÉTÉ DE GESTION DES DÉCHETS NUCLÉAIRES (SGDN)**

**convened in Toronto, ON**  
**on February 28, 2013**  
**commencing at 9:00 a.m. EST**

**Present**

Gary Kugler	Director, Chair
Pierre Charlebois	Director
Donn Hanbidge	Director
Ron Jamieson	Director
Darren Murphy	Director
Ken Nash	Director, President & CEO
Deborah Poff	Director (via teleconference)
Ian Ross	Director
Josée Pilon	Director

**Staff in attendance:**

Chris Hatton	Director, APM Repository Design Development (except items 1-4)
Michael Hung	Chief Financial Officer (except items 1-4)
Mark Jensen	Director, DGR Geoscience & Research (Item 12)
Pat Moran	General Counsel and Corporate Secretary
Gillian Morris	Assistant Board Secretary (except item 4)
Sean O'Dwyer	VP, Human Resources (except items 1-4)
Sean Russell	Director, Repository Research & Development (except items 1-4)
Kathryn Shaver	VP, APM Engagement & Site Selection (except items 1-4)
Derek Wilson	VP, L&ILW DGR Design & Construction (except items 1-4)

**Guests:**

David Crombie	Chair, NWMO Advisory Council (Item 7) (via teleconference)
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1. Constitution of Meeting and Approval of Agenda

Notice of the meeting having been given to all of the Directors of the Company in accordance with the by-laws and a quorum being present, the Chair declared the meeting duly constituted for the transaction of business and called the meeting to order at 9:00 am.

The agenda for the February 28, 2013 meeting was approved.

2. Minutes of Previous Meeting

The minutes of the meeting of the Board of Directors held on November 29, 2012, copies having been sent to each member of the Board, were approved with one minor amendment.

3. Business Arising from the Previous Minutes

Pat Moran reviewed the status of the action items from previous meetings.

4. In Camera Session

The Board convened an *in camera* session to discuss the report from the Chair of the Human Resources and Compensation (HRC) Committee.

5. Report from the Siting Committee

Mr. Jamieson provided a report to the Board on the February 27<sup>th</sup>, 2013 Siting Committee meeting. He reported that the Siting Committee reviewed and discussed the following:

- an update on each of the communities involved in various stages of the site selection process. Committee members discussed outreach to Aboriginal communities by the siting communities engaged in the process and encouraged NWMO to emphasize to the siting communities the value of involving surrounding Aboriginal communities in dialogue, and incorporating Aboriginal Traditional Knowledge wherever possible;
- the status of the preliminary assessments underway;
- the large amount of work being handled by staff in the field. The Committee members asked management to pass along the Committee's appreciation for their efforts;
- readiness for proceeding with the next stages in the site selection process;
- management's review of the process for acquiring land in Saskatchewan and Ontario;
- possible directions for expanded capacity-building programs for communities proceeding to Phase 2 and an expanded dialogue with Aboriginal people as an integral part of the Phase 2 assessment;
- staff's proposed plan to disposition requests flowing from the last Council of Elders meeting. The Committee agreed with staff's proposal;
- activities underway to build relationships in support of siting, as well as management of risks in the external landscape; and

- expenditures made to communities. Siting Committee members asked management to ensure that any expenditures made to communities continue to be carefully considered and be well-tracked.

Directors supported the Committee's desire to ensure expenditures to communities continue to be carefully made and tracked.

6. Report from the Audit, Finance & Risk (AFR) Committee

Mr. Ross provided a report from the Audit, Finance and Risk Committee meeting held on February 27, 2013.

Mr. Ross reported that the AFR Committee reviewed the 2012 audited financial statements and the auditor's report. It was reported that in 2012 NWMO adopted the new CICA accounting standards for not-for-profit organizations and also the accounting standards for private enterprises for topics not addressed by the not-for-profit standards. However, there was no impact on the statement of financial position or on the statements of operations and changes in net assets and cash flows as a result of applying these standards.

Mr. Ross reported no significant issues were identified by Deloitte during the course of their audit and Deloitte will provide a signed audit report once the financial statements have been approved by the Board. The AFR Committee recommended that the Board approve the 2012 audited financial statements.

**IT IS HEREBY RESOLVED THAT:**

Further to the recommendation of the Audit, Finance & Risk Committee, the Board approves the 2012 Financial Statements for the NWMO fiscal year ended December 31, 2012, as audited and presented by the external auditors, Deloitte LLP.

The motion was made, seconded and unanimously passed.

Mr. Ross reported that the Committee also discussed:

- a review of NWMO's risks;
- an update on the 2013 performance objectives and measures;
- an update on the NWMO pension fund;
- an update on the Lifecycle Liability Management workplans;
- management reports including financial results, cash flow forecast and the compliance report;
- a review of the Chair and President's expenses, which were satisfactory; and
- an update to the Organization Authority Register.



7. Report from the Advisory Council

Mr. Crombie reported on the Advisory Council's meetings of January 28 and February 11, 2013.

On January 28, at Council's request, a special meeting was held with a focus on Aboriginal Traditional Knowledge (ATK). Dr. Edward Connors was brought in to lead a discussion on different world views and the integration of ATK. Dr. Connors provided a helpful discussion on building respect, maintaining relationships and the importance of respecting Aboriginal Traditional Knowledge.

In the afternoon on January 28, Council was devoted to discussions with NWMO staff, reviewing and commenting on the Aboriginal engagement workplan for 2013 and on staff's proposed dispositioning of requests from the Council of Elders.

On February 11, 2013, Council held their first regular meeting of the year. Council discussed the following items:

- the Council's 2012 Advice Tracking Matrix and staff's dispositioning of this advice;
- planning for Council preparation of its comments on the NWMO 2011-2013 Triennial Report;
- a full discussion on risks related to APM;
- a draft readiness matrix associated with completing Phase 1 assessments;
- an update on NWMO's support to OPG's low and intermediate level waste DGR project;
- a staff review of the external landscape affecting APM implementation; and
- *in camera* finalization of Council's annual letter to the Minister of Natural Resources.

8. President's Report

Mr. Nash updated the Board on developments since the last Board meeting, which included:

- developments in Bruce County;
- the progression of the site selection process;
- a recent meeting with Natural Resources Canada;
- meetings with Saskatchewan government ministries;
- submission of the pre-project report on repository design and safety in crystalline rock to the Canadian Nuclear Safety Commission;
- an update on other technical areas of APM, including transportation, the findings of the Independent Technical Review Group (ITRG), container design development and proof testing;
- an update on the OPG L&ILW DGR regulatory review;
- recent developments in the United Kingdom's siting process;
- meetings with Japanese counterparts on NWMO's program;
- developments in the U.S.A.; and
- renewal of NWMO's international cooperation agreements.

It was also reported that NWMO recently participated in an international waste management conference in Phoenix presenting in three different sessions.

Directors discussed the recent news report of highly enriched uranium being transported from Chalk River to the U.S. Board members also discussed the possibility of further cooperation between waste owners in Canada.

A suggestion was made by a Board member that the Board may benefit from a presentation on incorporating Aboriginal Traditional Knowledge into NWMO's work. A presentation will be organized for an upcoming Board meeting (\*).

9. Update on the APM Siting Process

Ms. Shaver updated the Board on the developments in the siting process since the last Board meeting. She reported that additional communities have elected to move from Step 2 to Step 3 and are requesting preliminary assessments. NWMO's 2013 workplan is focused on delivering assessments and supporting those communities with their public dialogues, citizen engagement, learning activities and outreach to Aboriginal communities and regional opinion leaders. She also noted that NWMO is preparing for another milestone in the siting process – the start of the process by which communities are selected for the second phase of Step 3, which will involve fieldwork.

Directors discussed Ms. Shaver's report on the status of the preliminary assessments of some communities and enquired how community support will be reflected in the preliminary assessments.

10. Disposition of Advisory Council Advice

Ms. Shaver discussed NWMO's dispositioning of the Advisory Council's advice in 2012. She presented the tracking matrix of Council advice, that was finalized with Council at its February 11, 2013 meeting. Consistent with past practice, the table will also be made public through posting on the NWMO website.

In discussing the tracking matrix of advice, Directors commented on the Advisory Council's strong focus on Aboriginal engagement and traditional knowledge and related topics which aligned with NWMO's commitment to these important areas. A Director suggested the Council provides much value to NWMO and management might profile the Council more publicly. Directors also discussed the development of an Aboriginal procurement policy. Management reported that while NWMO is working to develop this policy it is currently hiring some well respected companies with experience in this area.

11. Developments Over the Past Year

Ken Nash discussed with the Board management's high level overview assessment of the developments that have occurred since NWMO's last business planning cycle was initiated in early 2012 and provided background information on a number of recent developments.

Mr. Nash discussed public comments made in Bruce County regarding reprocessing and the need for two separate DGRs for low level waste and used fuel. NWMO is considering the implications of these issues. NWMO is preparing an information piece for release in Bruce County to assist in clarifying these issues



Mr. Nash also discussed Saugeen Ojibway Nation's request to the Joint Review Panel to include an assessment of the cumulative effects of the low level waste DGR and APM in Bruce County. OPG has made its submission to the Joint Review Panel on this matter.

Board members also discussed various aspects of transportation issues including the recent news report of AECL's shipments of highly enriched uranium to a U.S. reprocessing plant. Directors supported further waste owner cooperation, particularly on transportation related matters.

Mr. Nash reviewed the status of used fuel management programs internationally.

12. Disposition of Independent Technical Review Group (ITRG) Recommendations

The ITRG presented its 2012 findings to the NWMO Board in November 2012. Mark Jensen discussed NWMO's disposition of the comments of the ITRG in its report. The report was taken as written. Directors asked questions about two of the recommendations.

13. Submission of the Pre-project Report on Repository Design and Safety in Crystalline Rock to the Canadian Nuclear Safety Commission

In December 2012, NWMO submitted a pre-project report on used fuel repository design and safety to the CNSC for review. The purpose of the case study pre-project report is to show how the NWMO's conceptual repository design and safety assessment approach addresses CNSC expectations including those of CNSC Guide G-320, Assessing the Long Term Safety of Radioactive Waste Management.

Directors discussed:

- costs of producing this report and the format of the CNSC review;
- questions asked by the regulator of SKB in Sweden;
- what form the CSNC's review would take; and
- the dose acceptance criteria included in the report.

Directors are supportive of submitting a pre-project report to the CNSC.

14. Potential DGR Cost Savings Arising from an Optimized Repository Container Design

Management provided the Board with an update of the potential DGR cost savings related to the implementation of optimized used fuel containers (UFC); potential Mark II designs, as compared to the reference Mark I designs completed in 2011. In 2012, NWMO undertook an assessment to: 1) identify if there were potential savings to be realized from the Mark II design, and 2) if savings were identified, develop the technical basis to support decisions for the possible selection of the Mark II design.

Directors discussed possible cost savings and optimal container sizing. While there may be possible cost savings with the Mark II container design, Directors noted it will require a high level of confidence, requiring proof testing and demonstration of the safety of the design, and cost savings may be offset by the costs of these activities.

15. Outline Plan for APM DGR Design Development and Proof Testing

Management provided a high level overview of how NWMO plans to develop and optimize APM generic repository designs by September 2014 for the purpose of proof testing. Many aspects of the generic designs will be applicable to site specific designs when a single site is selected.

Chris Hatton explained the differences between the Mark I and Mark II DGR designs. Derek Wilson discussed the timelines for design development and proof testing noting that both designs will be carried forward until NWMO determines site specific conditions.

16. Business Risk

Michael Hung reviewed the key risks on both the APM and the OPG L&ILW DGR projects. The presentation of risks has been updated based on input from Board and Advisory Council.

Mr. Hung reviewed the risks that had increased over the period and others that were no longer considered high level risks.

17. Compliance with Occupational Health and Safety and Environmental Policies

Management reviewed the NWMO's performance on occupational health and safety and environmental protection. It was noted that the Board approved the Occupational Health and Safety Policy on April 12, 2011 and the Environmental Protection Policy on February 16, 2011. These policies, along with a suite of supporting procedures were developed in preparation for the planned commencement of fieldwork by the NWMO at the OPG DGR site in Kincardine. Since then, NWMO has carried out fieldwork at the DGR site in Kincardine and has also carried out public engagement activities as part of the APM Siting process.

Pat Moran outlined the responsibilities for health and safety within NWMO and noted the formation of a Health, Safety and Environment Committee. He suggested that it would be appropriate for the Board to review the NWMO's performance on occupational health and safety and environmental protection on a regular basis to satisfy itself that the NWMO is proceeding with due diligence.

On the OPG DGR fieldwork there were no reportable incidents and NWMO obtained both the CSA Z1000 and ISO 14001 registration, with contractors being included in the assessment.

For the APM fieldwork program an APM siting employee safety plan is in place and staff training has been conducted. The plan has been updated based on the APM fieldwork experiences in 2012.

At the NWMO head office, NWMO created a Joint Health and Safety Committee (JHSC) that meets several times a year. The report of the JHSC for January 2013 revealed that there were no current issues or concerns to be addressed and there were no significant health and safety related incidents in 2012.



18. In Camera Session

The Board held an in camera session.

19. Update on OPG L&ILW DGR

Derek Wilson provided an update on the work on the OPG L&ILW DGR. He outlined the number of information requests received from the Joint Review Panel. The JRP has requested a third technical information session with a focus on socio-economic impacts. The Board asked that management provide them with the on-line link to this technical session (\*).

20. Legal / Corporate Secretary Report

Pat Moran advised that the NWMO has completed the transition to the Canada Not-For-Profit Corporations Act. In accordance with the new Act, NWMO revised its bylaws and filed its articles of continuance, both of which were approved at the last AGM. The NWMO has received its Certificate of Continuance.

Mr. Moran also asked the Board for feedback on the implementation of the electronic Board Portal system aimed at eliminating large amounts of paperwork associated with each Board meeting. Directors reported that the system was intuitive and easy to use and were supportive of the system's implementation. Mr. Moran noted the excellent work done by Ms. Morris in achieving a successful implementation.

21. Upcoming Meetings

The next meeting of the Board of Directors is Thursday, June 6, 2013.

22. In Camera Session


The Board met *in camera*.

Conclusion of Meeting


There being no other business, the Chair declared the meeting adjourned at 2:00 p.m.

(\*) Denotes actions to be taken.

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Pat Moran  
Corporate Secretary



Dr. Gary Kugler  
Chair