

# **UK Long-Term Nuclear Waste Management: Next steps?**

**6 November 2006 to 7 November 2006 - 10 a.m. Monday to 5 p.m. Tuesday**

## **Introduction**

The Committee on Radioactive Waste Management (CoRWM) have now made their recommendations on long-term UK nuclear waste management. However, their remit did not cover all the scientific issues that need to be addressed to take the recommendations forward. There is a consensus amongst the learned and professional societies on the need for a multi-disciplinary approach to addressing CoRWM's recommendations. We are holding a 2-day meeting on 6-7<sup>th</sup> November 2006 at Loughborough University Conference Centre to bring together the various disciplines involved in nuclear waste management to rigorously debate the scientific certainties and uncertainties surrounding future nuclear waste management issues, and to agree actionable recommendations.

## **Workshop Outputs and Impact of the Event**

The workshop will comprise of a series of problem focussed sessions in which invited speakers and an expert panel will provide an overview of the area to be followed by a scientific and managed debate.

A report summarising the consensus scientific and engineering recommendations from the workshop will be presented as a joint publication from all the learned and professional societies involved. It will be used to inform and influence key decision makers and will be distributed to policy makers in, amongst others, UK Government and devolved Administrations, NDA, Nirex, BNG, the research councils and others and will be of interest to all stakeholders in nuclear waste management.

A dissemination meeting is planned for late January 2007 in London (venue to be confirmed) for senior policy and decision makers from Government to attend. A media/press briefing session will be held the day before.

## **Technical programme**

- Overview "where are we now"
- Wastes for storage and disposal including monitoring
- Geological Repository Concepts
- Long term safety, chemical and physical processes
- Implementation
- International experience
- Summary

### **Technical Organising Committee**

Dr Nick Evans (Loughborough University) [n.d.m.evans@lboro.ac.uk](mailto:n.d.m.evans@lboro.ac.uk)

Dr Jeff Hardy (RSC) [hardyj@rsc.org](mailto:hardyj@rsc.org)

Professor Bruce Yardley (Leeds University) [bruce@earth.leeds.ac.uk](mailto:bruce@earth.leeds.ac.uk)

Dr Edmund Nickless (Geological Society) [edmund.nickless@geolsoc.org.uk](mailto:edmund.nickless@geolsoc.org.uk)

Dr Colette Grundy (Environment Agency) [colette.grundy@environment-agency.gov.uk](mailto:colette.grundy@environment-agency.gov.uk)

Dr Jocelyn Bia (Energy Institute) [jbia@energyinst.org.uk](mailto:jbia@energyinst.org.uk)

Dr Alan Hooper (UK Nirex) [Alan.Hooper@nirex.co.uk](mailto:Alan.Hooper@nirex.co.uk)

Bruce McKirdy (UK Nirex) [bruce.mckirdy@nirex.co.uk](mailto:bruce.mckirdy@nirex.co.uk)

Dr Neil Smart (NDA) [neil.smart@nda.gov.uk](mailto:neil.smart@nda.gov.uk)

Dr Georgia Nakou (IET) [g.nakou@iee.org.uk](mailto:g.nakou@iee.org.uk)

Dr Tajinder Panesor (Institute of Physics) [tajinder.panesor@iop.org](mailto:tajinder.panesor@iop.org)

Dr David Gooch (IMMM) [david.gooch@lineone.net](mailto:david.gooch@lineone.net)

Dr Antoni Miodowski (BGS) [aem@bgs.ac.uk](mailto:aem@bgs.ac.uk)

Dr Julia West (BGS) [jmwes@bgs.ac.uk](mailto:jmwes@bgs.ac.uk)

Dr Gráine Carpenter (UKAEA) [grainne.carpenter@ukaea.org.uk](mailto:grainne.carpenter@ukaea.org.uk)

Mark Bentley (SAFEGROUNDS) [jo.facer@ciria.org](mailto:jo.facer@ciria.org)

Professor David Read (Aberdeen University) [d.read\\_enterpris@btinternet.com](mailto:d.read_enterpris@btinternet.com)

Dr Richard Heap (Royal Society) [Richard.heap@royalsociety.ac.uk](mailto:Richard.heap@royalsociety.ac.uk)

Dr Fred Plumb (Ministry of Defence) [NW-SIM@dpa.mod.uk](mailto:NW-SIM@dpa.mod.uk)

### **Need for Sponsorship**

Sponsorship from learned and professional bodies and relevant organisations is required so that participant costs and host liability is minimised and attendance and impact are maximised. The learned societies including the Royal Society of Chemistry, Geological Society, Energy Institute, Institute of Electrical Engineers, Institute of Physics and Institute of Materials are represented on the Technical Organising Committee. Current sponsors include organisations such as UK Nirex, NDA, UKAEA, BGS, EA, BNG and the Dalton Institute. Although it won't be an invited audience the intent is to reach around 120-200 max leading players in the field.

### **Benefits of Financial Sponsorship**

- A place on the technical organising committee
- 2 free participant places
- 3 paying participant places reserved for the sponsor organisation
- High visibility badging on web page, throughout workshop, delegate information and final report
- The opportunity for delegate pack inserts and to disseminate material during the workshop (it has been agreed by the Technical Organising Committee that a commercial exhibition is not appropriate for the technical meeting and exhibition stands will be limited to those from the sponsoring organisations)
- Exhibition Stand for networking and promotion of capability. Note organisations will be allowed to man the exhibition stands with additional staff to those speaking/ attending in free and reserved places.

## Financial Commitment

Learned and Professional bodies and other charities/NGOs - £2000

Other organisations - £5000

Note sponsorship is a VAT charged activity and costs shown above exclude VAT.

## Sponsoring bodies

The following organisations have generously agreed to sponsor the event:

 **RSC** | Advancing the  
Chemical Sciences

[www.rsc.org.uk](http://www.rsc.org.uk)

 **energy**  
INSTITUTE

[www.energyinst.org.uk](http://www.energyinst.org.uk)

**Institute of Physics**

[www.iop.org](http://www.iop.org)



[www.geolsoc.org.uk](http://www.geolsoc.org.uk)



[www.environment-agency.gov.uk](http://www.environment-agency.gov.uk)



[www.theiet.org](http://www.theiet.org)



[www.nirex.co.uk](http://www.nirex.co.uk)



[www.lboro.ac.uk](http://www.lboro.ac.uk)



[www.ukaea.org.uk](http://www.ukaea.org.uk)



[www.bgs.ac.uk](http://www.bgs.ac.uk)



[www.nda.gov.uk](http://www.nda.gov.uk)



[www.britishnucleargroup.com](http://www.britishnucleargroup.com)



The University of Manchester  
Dalton Nuclear Institute

[www.eps.manchester.ac.uk/dalton](http://www.eps.manchester.ac.uk/dalton)

**The venue:** <http://www.welcometoimago.com/index.php?id=10>

## Application and fees

£199 + VAT for participants staying overnight

£125 + VAT for participants attending both days, but not staying overnight

£80 + VAT for participants attending one day only

## Cancellation policy

Cancellations received before 6<sup>th</sup> October will incur an administration charge of 25%. It will not be possible to offer any refunds on cancellations (including for accommodation, meals or social events) received after 6<sup>th</sup> October, although a change in attending delegate can be made at any time. Changes to bookings for accommodation, meals or social events cannot be accepted after 6<sup>th</sup> October.

## Contact information

Laura Viscione at The Energy Institute for registration ([laura@energyinst.org.uk](mailto:laura@energyinst.org.uk))

Jeff Hardy ([hardyj@rsc.org](mailto:hardyj@rsc.org)) or Nick Evans ([n.d.m.evans@lboro.ac.uk](mailto:n.d.m.evans@lboro.ac.uk)) for technical information

<b>Monday November 6th</b>	
<b>Time</b>	<b>Event</b>
09.00	Registration
10.00	<b>CHAIRS INTRODUCTION - Prof. Peter Warwick</b>
	<b><u>INTRODUCTORY SESSION – THE CURRENT POSITION</u></b>
10.15	<b>SPEAKER 1:</b> Implementation recommendations by CoRWM (CoRWM)
10.30	<b>SPEAKER 2:</b> Planning/timeline for a repository (Bruce McKirdy, Nirex)
10.45	<b>SPEAKER 3:</b> Government position (Defra, TBC)
11.00	Coffee Break
	<b><u>SESSION 1: INTERNATIONAL CASE STUDIES</u></b>
11.15	<b>SESSION CHAIR</b>
11.20	<b>SPEAKER 1:</b> Finnish case study (Dr Juhani Vira, Posiva, Finland)
11.35	<b>SPEAKER 2:</b> French case study (Frederic Plas, Andra)
11.50	<b>SPEAKER 3:</b> Swiss case study (Piet Zuidema, Nagra)
12.05	<b>SPEAKER 4:</b> EC ESDRED project (Wolf Seidler, Andra)
12.20	<b>PANEL DISCUSSION:</b>
12.50	Lunch
	<b><u>SESSION 2: GEOLOGICAL REPOSITORY</u></b>
13.50	<b>SESSION CHAIR</b>
13.55	<b>SPEAKER 1:</b> Potential Geological settings in the UK (Dr Richard Shaw, BGS)
14.10	<b>SPEAKER 2:</b> Repository design concepts (Alan Hooper, Nirex)
14.25	<b>SPEAKER 3:</b> Characteristics of different host rock types (Tim McEwen, McEwen Consulting)
14.40	<b>SPEAKER 4:</b> Phasing, retrievability and early/late closure (Fiona Neall, Neall Consulting Limited)
14.55	<b>SPEAKER 5:</b> Deep boreholes disposal option for some wastes (Fergus Gibb, University of Sheffield)
15.05	<b>PANEL DISCUSSION</b>
15.45	Coffee break
	<b><u>SESSION 3: LONG TERM SAFETY, CHEMICAL AND PHYSICAL PROCESSES</u></b>
16.15	<b>SESSION CHAIR</b>
16.20	<b>SPEAKER 1:</b> Regulation of a future long-term radioactive waste management facility (Steve Griffiths, HSE)
16.35	<b>SPEAKER 2:</b> Technical status of the programme for a deep geological repository: A regulatory view (Andy Baker, EA)
16.50	<b>SPEAKER 3:</b> Engineered barriers and post-closure near-field interactions (Patrik Sellin, SKB)
17.05	<b>SPEAKER 4:</b> Far field interactions (Prof. Peter Warwick, Loughborough)
17.20	<b>SPEAKER 5:</b> Confidence from geoscience that radionuclides will be contained (Charles Curtis, Nirex - TBC)
17.35	<b>PANEL DISCUSSION</b>
18.30	Mixer reception (exhibition)
19.30	Dinner

<b>Tuesday November 7th</b>	
Time	Event
09.00	Coffee + Registration
09.30	<b><u>SESSION 4: WASTES FOR STORAGE AND DISPOSAL INCLUDING MONITORING</u></b>
09.35	<b>SESSION CHAIR</b>
09.35	<b>SPEAKER 1:</b> LLW, ILW, HLW (CoRWM - TBC)
09.50	<b>SPEAKER 2:</b> Waste arising from decommissioning (Phil Davis, NDA)
10.05	<b>SPEAKER 3:</b> Disposal of LLW (Alan Wareing/Chris Lennon, Nexia Solutions)
10.20	Coffee
10.50	<b><u>SESSION 4 (CONTIUNED): WASTES FOR STORAGE AND DISPOSAL INCLUDING MONITORING</u></b>
10.50	<b>SPEAKER 4:</b> Plutonium disposition (Dr Joe Small, Nexia Solutions)
11.05	<b>SPEAKER 5:</b> Problem waste types (Prof Bill Lee, Imperial College London)
11.20	<b>SPEAKER 6:</b> Waste from new build (Dr Adrian Bull, BNFL)
11.35	<b>SPEAKER 7:</b> EU Framework VI project on Near-Field Processes (Dr Neil Hyatt, Sheffield)
11.50	<b>PANEL DISCUSSION</b>
12.30	Lunch
13.30	<b><u>SESSION 5: IMPLEMENTATION</u></b>
13.30	<b>SESSION CHAIR</b>
13.35	<b>SPEAKER 1:</b> Above ground storage of waste (Peter Wylie, BNG and Gráinne Carpenter, UKAEA)
13.50	<b>SPEAKER 2:</b> Experience of stakeholder engagement (Beth Taylor, UKAEA)
14.05	<b>SPEAKER 3:</b> Status of stakeholder engagement in Canada (Prof. Elizabeth Dowdeswell, NWMO - TBC)
14.20	<b>SPEAKER 4:</b> Skills/training/funding needs (Prof. Richard Clegg, Dalton Nuclear Institute)
14.35	<b>SPEAKER 5:</b> International repository operation experience (Wendell Weart, WIPP - TBC)
14.50	<b>PANEL DISCUSSION</b>
15.30	Coffee break
16.00	<b><u>RAPPORTEUR/CHAIR FEEDBACK AND CLOSE</u></b>