

# JOINT CONVENTION NEWS JOINT CONVENTION ON THE SAFETY OF SPENT FUEL MANAGEMENT AND ON THE SAFETY OF RADIOACTIVE WASTE MANAGEMENT



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# **INTRODUCTION & PURPOSE**

#### PRESIDENT'S MESSAGE

#### THE SECOND DECADE OF THE JOINT CONVENTION

Commemorating the tenth anniversary of the Joint Convention on 18 June 2011, I am very pleased to deliver my message through the Second Edition of Newsletter as the President of the Fourth Review Meeting of the Joint Convention.

For the last ten years, we have made significant progress, not only in expanding the number of Contracting Parties, but also in carrying out in-depth discussions during the review process. The Contracting Parties have identified, shared, and propagated good practices for the worldwide safe management of radioactive waste and spent fuel worldwide and cooperated together in order to cope with a variety of common challenges elicited in the review process.

I am confident that through the review process of the Joint Convention, the Contracting Parties have not only improved their own respective safety levels of spent fuel and radioactive waste management but provided the international community with a driving force to promote a Global Radioactive Waste Safety Framework.

Now, with the Fourth Review Cycle of the Joint Convention, we will continue fostering a practical and mutually beneficial way of cooperation to achieve a high level of safety in the framework of the Joint Convention.

At the Organizational Meeting last May, I emphasized several issues to be considered under the Joint Convention for the next three years, which include: expanding the number of Contracting Parties; holding forums for profound discussion on diverse subjects raised in the Joint Convention; disseminating good practices in handling radioactive waste, including disused radiation sources; discussing the optimization of the interface between safety and security; strengthening the interactions with existing networks of the IAEA and discussing lessons learned for spent fuel and radioactive waste management from the Fukushima event.

I will strive to make the issues addressed and discussed all through the Fourth Review Cycle of the Joint Convention and then convey the outcome of discussions and adjusted unresolved issues to the succeeding President, who will be able to take them into consistent consideration along with brand new issues to be derived in the Fifth Review Cycle of the Joint Convention.

It is certainly essential for Contracting Parties to maintain continuity in discussing the issues between the review meetings through certain arrangements for further communication. This is in line with the reason why this Newsletter was renewed based upon the recommendation at the Third Review Meeting of the Joint Convention. This review meeting was led by the respectable President Dr. Kunihisa Soda, who initiated means to establish dialogue between review meetings. I encourage all the Contracting Parties to contribute to and participate in further improving this Newsletter in order to maintain this as an effective communication tool under the Joint Convention.

I would like to conclude my message by wishing that all the Contracting Parties share the view that there is a need of continuity and ongoing communication between review meetings, hence together develop various efficient ways of achieving it. At the beginning of the second decade of the Joint Convention, I am confident that our efforts will be important in strengthening the Global Radioactive Waste Safety Framework.



Mr. Chang Sun Kang President Fourth Review Meeting of the Joint Convention

## PREPARING FOR THE FOURTH CYCLE ORGANIZATIONAL AND REVIEW MEETINGS



#### ORGANIZATIONAL MEETING AND OFFICER'S TURNOVER MEETING

An Organizational Meeting was held 10-11 May 2011, in Vienna, Austria, 12 months before the Fourth Review Meeting in accordance with INFCIRCs 602/Rev. 3 and 603/Rev. 4. The purpose of the meeting was to develop detailed plans for the Fourth Review Meeting. This meeting was followed by the Workshop of Incoming and Outgoing Officers on 12 May 2011, which ensured continuity and knowledge transfer amongst the outgoing and incoming officers. The goals for the Fourth Review Meeting are to achieve and maintain a high level of safety worldwide in spent fuel and radioactive waste management practices. In order to fulfill these goals, the actions of the Contracting Parties and their respective reports for the Fourth Review Meeting should include the following topics: 1) Developing a comprehensive regulatory framework; 2) Ensuring effective regulatory body independence; 3) Implementing spent fuel and waste management strategies with visible milestones; 4) Providing funding to secure effective waste management; 5) Educating and recruiting competent staff and employees; and 6) Developing geological repositories for high level waste. Planning for the Fourth Review Meeting is under way. In addition, it was suggested to the Contracting Parties at the Organizational Meeting that any improvements their country has made in the area of spent fuel management, as a result of the Fukushima incident, be included in their National Presentations. The Fourth Review Meeting will be held in Vienna, 14-23 May 2012.

# TABLE OF OFFICERS FOR THE 4TH REVIEW MEETING

President: Mr. Chang Sun Kang (Korea) Vice Presidents: Ms. Olena Mykolaichuk (Ukraine) Mr. Andy Hall (UK) OEWG Chair

	GROUP 1	GROUP 2	GROUP 3	GROUP 4	GROUP 5	GROUP 6
CHAIRPERSON	Mr. D. Trifunovic Croatia	Mr. L. Camper USA	Mr. J. J. Dumont France	Mr. K. Hioki Japan	Mr. P. Lietava Czech Rep	Mr. W. Mester Germany
VICE Chairperson	Mr. J. Wei China	Mr. S. Woollett Australia	Mr. M. Hugi Switzerland	Ms. H. Roman Canada	Ms. A. Shehhi UAE	Mr. M. Turner Slovakia
RAPPORTEUR	Mr. J. Cheong Republic of Korea	Ms. M. Skrzeczkowska Poland	Mr. E. Garcia Neri Spain	Ms. L. Khechane South Africa	Mr. J. Joyce USA	Mr. M. Vannerem UK
Coordinator	Mr. M. Ionescu Romania	Mr. B. Hedberg Sweden	Ms. M. Yamada Japan	Ms. N. Zelcznik Slovenia	Mr. G. Hillebrand Austria	Mr. K. Hae- maelaeinen FINLAND

# TIMETABLE OF FOURTH REVIEW MEETING

#### ORGANIZATIONAL MEETING OF THE FOURTH REVIEW MEETING 10 TO 11 MAY 2011, VIENNA, AUSTRIA, PROVISIONAL TIMETABLE FOR THE FOURTH REVIEW MEETING, 14-23 MAY 2012

		Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	
	14 May 2012	Plenary						
Monday		United States of	Lithuania	China .	Argentina	Italy	Finland	
		America	Greece		Rep Moldova	Cyprus	Belarus	
Tuesday	15 May 2012	Spain	Sweden	Japan	Ukraine	Germany	Canada	
		TFRY Macedonia	EURATOM	Estonia	Denmark	Ireland	Latvia	
Wednesday	16 May 2012	Belgium	Slovak Republic	Bulgaria	United Kingdom	Switzerland	Russian Federation	
		Georgia	Tajikistan	Iceland	Montenegro	Luxembourg	Croatia	
Thursday	17 May 2012	Netherlands	France	Brazil	Czech Republic	Korea, Republic of	Norway	
							Poland	
		Romania	Uruguay	Kazakhstan	Indonesia	Austria	Future Ratifier 3	
Friday	18 May 2012	UAE	South Africa	Senegal	Slovenia	Portugal	Hungary	
		Gabon	Ghana	Uzbekistan	Australia	Nigeria	Kyrgyzstan	
		Albania		Morocco		Future Ratifier 4		
Saturday	19 May 2012	Rapporteurs Report Finalization						
Sunday	20 May 2012	Officers' Meeting to Discuss Rapporteurs Reports and Summary Report						
Monday	21 May 2012	Final Plenary - Rapporteurs Reports						
Tuesday	22 May 2012	Final Plenary - OEGW Report - Summary Report Discussion						
Wednesday	23 May 2012	Final Plenary - Summary Report Agreement - President's Report						

NOTES: Country Group Sessions to be held on Monday 11:00hrs-12:00 hrs, 14:00hrs-17:00hrs, Tuesday-Friday 09:00hrs-12:00hrs, 14:00hrs-17:00hrs

Contracting Parties were allocated to this Timetable considering that those CPs having 5 or more NPPs will have 4 hours for their presentations, CPs having 4 or less NPPs will have 3 hours for their presentations and those CPs without NPP will have 2 hours for their presentations

#### **TOPICS OF INTEREST**

#### PROGRESS IN RADIOACTIVE WASTE DISPOSAL IN THE UNITED STATES OF AMERICA

#### DOE Opens New Mixed Low-Level Waste Disposal Unit in Nevada

The new mixed low-level waste (MLLW) disposal unit at the U.S. Nevada National Security Site (NNSS), formerly known as the Nevada Test Site, is now open to receive waste generated by cleanup activities across the U.S. Department of Energy (DOE) complex. The unit has a capacity of 25,000 cubic meters and is compliant with requirements of the Resource Conservation and Recovery Act (RCRA). RCRA was enacted in 1976 and is the principal Federal law in the United States of America governing the disposal of solid waste and hazardous waste. This unit received its first mixed low-level radioactive waste package on 26 January 2011, and replaced the MLLW disposal cell that closed on 30 November 2010.

#### CONSTRUCTION OF THE NEW TEXAS COMPACT AND FEDERAL DISPOSAL CELLS AT WASTE CONTROL SPECIALISTS (WCS) IS UNDERWAY

In 2009, the Texas Commission on Environmental Quality (TCEQ) issued a final radioactive material license and a hazardous waste permit authorizing Waste Control Specialists to construct and operate two separate and distinct disposal facilities: one for commercial Low-Level Waste (LLW) generated within the Texas Compact, which is composed of Texas and Vermont; and another for LLW and mixed LLW that is owned or generated by the U.S. Department of Energy. Because of the volume of LLW expected to be generated within the Texas Compact, WCS plans to dispose of LLW and mixed LLW from the U.S. Department of Energy (and LLW from waste generators outside of the Texas Compact). The State of Texas enacted legislation in June 2011 making possible receipt from generators outside the Texas Compact. Construction on both the Texas Compact Facility and Federal Facility is underway. Operation of the Texas Compact Facility is expected to begin in December 2011, followed by operation of the Federal Facility.

With the issuance of WCS's low-level disposal license in 2009, it is the first facility in the United States in the last 30 years licensed to dispose of commercial Class A, B, and C low-level radioactive waste.

For more information on Waste Control Specialists, see this link: <u>http://www.wcstexas.com/</u> (reference video for current status).



#### MOAB PROJECT

#### MOAB PROJECT DISPOSES OF ONE-QUARTER OF URANIUM MILL TAILINGS PILE

The U.S. Moab Uranium Mill Tailings Remedial Action Project has disposed of more than 25 percent of the uranium mill tailings pile located near Moab, Utah. Overall, 4.5 million tonnes of the 18 million tonnes at Moab had been relocated by late June 2011. The cleanup of the Moab mill site is being performed by the U.S. Department of Energy (DOE), and the work has been accelerated over the past two years with funds provided by the American Recovery and Reinvestment Act (ARRA). ARRA funds were used to relocate approximately 2.9 million tonnes during that period. The project is relocating the tailings from the banks of the Colorado River by using rail transport to a permanent disposal cell constructed by DOE near Crescent Junction, Utah.

At Crescent Junction, the tailings are placed in a DOE-constructed disposal cell that is excavated 7.6 meters below grade. The disposal facility is regulated by the U.S. Nuclear Regulatory Commission. The tailings material in the cell is a total of 15 meters thick, reaching 7.6 meters above ground. The tailings are then capped with a 3-meters thick, multi-layer cover composed of native soils and rock. In the summer of 2010, the project began placing final cover material on the portion of the compacted tailings that had met the final grade.

Remaining Moab project activities planned through September 2011 include excavation of the second portion of the disposal cell and placement of the final cover material on the compacted tailings already in the cell. About 130,000 cubic meters of cover material have been placed on the portion of the disposal cell that is at the final grade for tailings material. The tailings are remains from processing uranium ore for national defense programs and commercial nuclear power plants.

For more information on Moab, please see the following link:

http://www.gjem.energy.gov/moab/

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#### DOE RELEASE OF DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE DISPOSAL OF GREATER-THAN-CLASS C (GTCC) LOW-LEVEL RADIOACTIVE WASTE (LLRW) AND GTCC-LIKE WASTE

On 18 February 2011, the Department of Energy (DOE) issued a Draft Environmental Impact Statement (EIS) for the Disposal of Low-Level Radioactive Waste (LLRW) and GTCC-Like Waste (DOE/EIS-0375D, Draft EIS) for public review and comment. The formal comment period closed 27 June 2011. The DOE is currently reviewing the comments and plans to issue a Final EIS in 2012.

GTCC LLRW consists of a small volume of lowlevel radioactive waste generated from Nuclear Regulatory Commission and Agreement State licensed activities. GTCC LLRW includes activated metals from the decommissioning of nuclear reactors, disused or unwanted sealed sources, and other waste from medical, research, and industrial activities. "GTCC-like" waste consists of DOE owned or generated LLRW and potential non-defense transuranic waste which is similar to GTCC LLRW and for which there is currently no available disposal capability. GTCC waste does not include spent nuclear fuel or highlevel waste, and is comparable to intermediate level waste under the International Atomic Energy Agency classification system.

The Draft EIS analyzes potential environmental impacts from constructing and operating a new facility or facilities for the disposal of GTCC wastes, as well as the impacts of using an existing facility. A range of disposal methods are analyzed in the Draft EIS, such as a deep geologic repository and intermediate depth boreholes. DOE will develop a preferred alternative for inclusion in the Final EIS, which considers potential human health impacts, public comments, and other factors. Additional information on the GTCC EIS is available at

http://www.gtcceis.anl.gov.

#### UNITED KINGDOM - THE STORAGE OF LIQUID HIGH LEVEL WASTE AT SELLAFIELD: REVISED REGULATORY STRATEGY

The U.K.'s Office for Nuclear Regulation (ONR), an agency of the Health & Safety Executive which is the successor to the Nuclear Installations Inspectorate, has revised its strategy for providing regulatory control of the Highly Active Liquor (HAL) stocks at Sellafield. This HAL is a by-product of spent fuel reprocessing.

ONR's aims continue to be:

- 1. To ensure that HAL stocks are maintained as low as reasonably practicable; and
- 2. To ensure that Sellafield Ltd continues to reduce hazard potential across the Sellafield site.

In order to achieve the above, Sellafield Ltd requires appropriate operational flexibility to accelerate reprocessing and vitrification programmes.

To date, ONR's regulatory strategy has been to use formal Specifications to prescribe limits on Sellafield HAL stock volumes that continuously reduced over time. ONR's approach has been very successful, and Sellafield Ltd has fully complied with the Specifications since their introduction in 2001. HAL stocks have been reduced significantly and are now at their lowest levels since the 1980s, and well within current Specification limits.

However, because of continuing reprocessing and vitrification, the Specification does not provide Sellafield Ltd with the flexibility required to achieve the aim of overall hazard re-



duction, nor necessarily to support operations in the best interests of safety.

ONR's new regulatory strategy has two components, i.e.:

- 1. A revised Specification expressed in terms of the mass of uranium in the unprocessed fuel from which the HAL was derived, which better reflects its hazard potential, and increases the buffer level to an extent which provides Sellafield Ltd with the flexibility to accelerate the hazard reduction.
- 2. Additional regulatory controls under the nuclear site licence for Operating Rules, to ensure that HAL stocks are kept as low as reasonably practicable.

ONR believes that this revised strategy will continue to provide effective regulatory control of HAL stocks consistent with the aim that Sellafield Ltd continues to reduce hazard potential on the site.

Further information is available at:

http://www.hse.gov.uk/nuclear/halstorage.htm

#### DOE CONTINUES PROGRESS IN TRANSURANIC WASTE DISPOSAL

The U.S. Department of Energy operates the Waste Isolation Pilot Plant (WIPP), a geologic repository, supported by programs that provide characterization, confirmation, and disposal of defense-related transuranic (TRU) waste. WIPP has seen over 12 years of safe operations, with over 17.7 highway truck kilometers traveled safely. Through July 2011, over 76,000 cubic meters of defense-TRU waste has been disposed with over 9,700 shipments. In addition, nineteen TRU generator sites have been de-inventoried of their legacy TRU waste.

For more information on WIPP, see the following link:

http://www.wipp.energy.gov/

# STATISTICS



# THE CURRENT NUMBER OF CONTRACTING PARTIES TO THE JOINT CONVENTION IS 60, AND THE LAST CHANGE IN STATUS WAS IN 2011 JUNE.

Twelve new Contracting Parties have joined since the Third Review Meeting.

Recently Joined Contracting Parties	Countries
Africa	Gabon
	Ghana
Asia	Indonesia
	Kazakhstan
	United Arab Emirates
Europe	Albania
	Cyprus
	Georgia
	The Former Yugoslav Republic of Macedonia
	(TFYR of Macedonia)
	Republic of Moldova
	Montenegro
	Portugal

# FOURTH REVIEW PROCESS SCHEDULE

#### 14 OCTOBER 2011

Deadline for Submission of National Reports

#### 14 FEBRUARY 2012

Deadline for Submission of Questions and Comments on National Reports

## 14 APRIL 2012

Deadline for Submission of Answers for National Reports

# 14-23 MAY 2012

Fourth Review Meeting

# JOINT CONVENTION NEWS

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