



International Symposium on the Disposal of Low Activity Radioactive Waste

**13–17 December 2004
Córdoba, Spain**

Organized by the
International Atomic Energy Agency (IAEA)

hosted by the
Government of Spain
through the
Empresa Nacional de Residuos Radiactivos, S.A. (ENRESA) and the
Consejo de Seguridad Nuclear (CSN)

in co-sponsorship with the
Agence nationale pour la gestion des déchets radioactifs (ANDRA) France and

in co-operation with the
OECD Nuclear Energy Agency (NEA)

ANNOUNCEMENT

AND

CALL FOR PAPERS

1. BACKGROUND

Low and intermediate level radioactive waste (LILW), containing both short and long lived radionuclides, are produced in the nuclear industry from activities such as uranium enrichment, fuel fabrication, reactor operations, decommissioning of nuclear facilities and fuel reprocessing, as well as in research laboratories, universities, hospitals and industries. The safe management of radioactive waste and specifically the need to protect humans and the environment now and in the future, has been given particular attention both internationally and in Member States having well established nuclear energy programmes. This issue is also of concern in many other Member States that are using radioactive materials only for medical, industrial or research purposes, as well in countries that generate waste with radioactive contamination from non-nuclear industrial activities.

The largest volumes of radioactive waste currently generated in Member States fall into the category of LILW. During the past few decades, much of this waste has been placed in near surface repositories. Consequently, methods and technologies for the disposal of LILW have developed and evolved considerably. More than 80 near surface disposal facilities have been built worldwide and more are under development. These facilities are designed to receive primarily short lived LILW containing limited amounts of long lived radionuclides. With the establishment of specific international safety standards for this type of facility, safety reviews and, in some cases, repository upgrading is taking place in Member States with repositories built to earlier standards.

An issue of current interest in many Member States is the management, and in particular the disposal, of the large volumes of very low activity radioactive waste derived primarily from the decommissioning of nuclear facilities. Possible management strategies for this type of waste are release after clearance, recycle within the industry, or disposal in a controlled facility. Substantial volumes of such waste exist and will be generated in the future. Many countries are seeking safe and cost-effective management solutions for this waste.

Several types of low activity radioactive waste, primarily those containing long lived radionuclides require special consideration in selecting appropriate disposal options. Examples are the technologically enhanced naturally occurring radioactive materials derived from industrial activities outside the nuclear sector; irradiated graphite waste from gas cooled reactors; some waste containing depleted uranium; long lived radioactively contaminated toxic waste, etc. A unique feature of these types of waste is that, even though the activity levels are low, the long half-lives of the radionuclides may render them unsuitable for disposal in a typical near surface disposal facility. Hence, alternative disposal options need to be explored.

The safe management of disused radioactive sources is another waste management topic of current interest. Although not strictly low activity waste, the topic is included in the Symposium because of the widespread interest in this issue. Of particular concern are the long lived radioactive sources, such as ^{226}Ra . Although the conditioning and packaging of disused radioactive sources are being carried out in many Member States, affording containment during the storage periods of a few decades, perpetual storage of waste is not considered to be a sustainable practice. Hence, innovative approaches and technologies, for example intrusion resistant, borehole- or shaft-type disposal facilities, are being explored for the safe disposal of disused radioactive sources.

The outcomes of recent international conferences organized by the International Atomic Energy Agency on topics, such as *Issues and Trends in Radioactive Waste Management*, Vienna,

9–13 December 2002; and *Management of Radioactive Waste from Non Power Applications/Sharing the Experience*, 5-9 November 2001, Malta, have also heightened awareness that the management of these kinds of waste is a recurring and emerging issue in many Member States that should be taken up at an international forum.

2. SYMPOSIUM OBJECTIVE

The main objective of the symposium is to provide an international forum for experts, specialists and decision makers to: (a) discuss policies and strategies for the safe management of low activity radioactive waste; (b) examine possible approaches for the safe disposal of the various waste types in this category; (c) share experiences and information relevant to this subject; and (d) explore future directions.

3. AUDIENCE

The symposium encompasses a broad spectrum of professional disciplines (including radioactive waste management, environmental science, radiation protection and radiological assessment), and therefore those attending the symposium are expected to include government officials, senior policy makers, persons from regulatory bodies, including associated external technical experts, and persons responsible for implementing radioactive waste management and disposal facilities.

4. PROGRAMME STRUCTURE

The symposium will be structured to facilitate focused discussion on specific topics and issues related to the management of low activity radioactive waste. Senior experts will introduce the major issues in each topical session. Panel sessions will provide an opportunity for a more intensive exchange of views on important technology and safety issues with the audience. Appointed chairpersons will draw conclusions from the presentations and discussions. The closing session will summarize the main conclusions drawn from the topical sessions and from discussions during the symposium.

Contributed papers will be displayed during poster sessions.

5. SCOPE OF THE TOPICAL SESSIONS

A sequence of topical sessions will examine the relevant issues, including:

- Policies and strategies for the management and disposal of low activity radioactive waste
 - International guidance
 - National approaches
 - Management practices in respect of the Joint Convention
- Overview of low activity radioactive waste
 - Sources, characteristics and quantities
 - Waste from decommissioning
 - Other sources (fuel cycle, NORM, etc.)
- Management and disposal of very low activity radioactive waste
 - Management and disposal alternatives
 - Country experiences
- Long lived low activity radioactive waste
 - Issues for long term safety
 - Management and disposal alternatives
- Challenging issues
 - Irradiated graphite
 - Disused radioactive sources
 - Depleted uranium

The management of uranium mining and milling waste, as well as remediation of contaminated sites, is outside the scope of this symposium.

6. SCIENTIFIC VISIT

A full day tour to the El Cabril near surface disposal facility for low and intermediate level radioactive waste is planned for Wednesday, 15 December 2004.

7. PARTICIPATION

Anyone wishing to participate in the symposium must send a completed Participation Form (**Form A**) through one of the competent official authorities (Ministry of Foreign Affairs or national atomic energy authority — see Section 10) for subsequent transmission to the IAEA. A participant will be accepted only if the Participation Form is transmitted to the IAEA by one of the official channels. Details on the logistics of the symposium will be sent to participants approximately three months before the symposium.

8. CONTRIBUTED PAPERS AND POSTERS

Concise papers on issues falling within the scope of the topical and panel discussion sessions (see Section 5 above) may be submitted as contributions to the symposium. These papers will not be presented orally, but will be included in a Book of Contributed Papers to be distributed free of charge to all participants upon registration. Authors of contributed papers are expected to present the substance of their papers in the form of a poster, which will be exhibited in the Poster Area.

The contributed papers must not exceed four pages in length and must be submitted in English. Each contributed paper must be preceded by an abstract, not exceeding 300 words. Authors should state to which topical session their contribution relates (see Section 5). Authors are urged to make use of the IAEA's Proceedings Paper Template in Word 2000 and the user instructions available on the symposium web page (Section 17). Guidelines for the preparation of a contributed paper are given in the attached IAEA Guidelines for Authors on the Preparation of Manuscripts for Proceedings.

Contributed papers should be submitted electronically to email address:

Symp-Radwaste2004@iaea.org

or sent on diskette to the Scientific Secretariat. The electronic submission should identify the paper, the proposed session topic and the software application used (the use of Microsoft Word is encouraged). To permit selection and review, the electronic version of the contributed paper must be received by the Scientific Secretariat not later than **28 June 2004**.

In addition to the electronic submission, a hard copy of the contributed paper must also be submitted through one of the competent official authorities (see Section 10), together with a completed Form for Submission of a Paper (**Form B**) and the Participation Form (**Form A**), to reach the IAEA also by **28 June 2004**.

Only papers that have been received by the above deadline and through the appropriate official channels will be considered for inclusion in the Book of Contributed Papers. The Secretariat reserves the right to exclude papers that do not comply with its quality standards or do not apply to one of the topics in Section 5 above.

Papers that are not sent through the official channels and papers arriving after the deadline will not be considered.

Authors will be informed by **end of August 2004** whether their papers have been accepted for inclusion in the Book of Contributed Papers and for presentation as a poster.

9. EXPENDITURES/GRANTS

No registration fee is charged to participants.

As a general rule, the IAEA does not pay for participants' travel and living expenses. However, limited funds are available to help meet the cost of attendance of selected specialists, mainly those from developing countries with low economic resources. Generally, not more than one travel grant may be awarded to any one country. To apply for a travel grant, please send the Grant Application **Form C** — typewritten or clearly printed — through your appropriate government authority (see Section 10), together with the Participation Form and, if relevant, the Form for Submission of a Paper, to reach the IAEA at the latest by **28 June 2004**. Incomplete or late applications will not be considered. The grants will be lump sums usually covering **only part of the cost** of attendance.

10. CHANNELS OF COMMUNICATION

The Participation Form (Form A), the Form for Submission of a Paper (Form B) and, if applicable, the Grant Application Form (Form C) must be sent through one of the competent official authorities (Ministry of Foreign Affairs or national atomic energy authority) for subsequent transmission to the IAEA. Communications concerning technical matters should be sent to the Scientific Secretariat, and communications on administrative/logistical matters to the Symposium Organizer (see Section 16).

11. DISTRIBUTION OF DOCUMENTS AND PROCEEDINGS

A preliminary programme of the symposium will be sent by airmail to all officially designated participants well in advance of the meeting and will also be available on the symposium web site (see Section 17).

The Final Programme and a Book of Contributed Papers, containing all papers accepted by the Programme Committee, will be available free of charge upon registration at the symposium.

The proceedings of the symposium, to be published by the IAEA, will contain the opening addresses, the keynote presentations, the other invited speakers' papers, the chairpersons' summaries, and the symposium conclusions presented by the President of the Symposium on the last day of the symposium. The proceedings of the symposium will be published by the IAEA as soon as possible after the meeting.

12. WORKING LANGUAGE

The working language of the symposium will be English. All communications must be sent to the IAEA in English.

13. ACCOMMODATION

Detailed information on accommodation and other administrative details will be sent to all officially designated participants approximately three months before the meeting. It will also be available on the symposium web site.

14. VISA

Designated participants who require a visa (Schengen visa) to enter Spain should submit the necessary application to the nearest diplomatic or consular representative of Spain as soon as possible. Please note that the procedure could take up to three weeks.

15. KEY DATES

Deadline for receipt of
electronic version of contributed papers **28 June 2004**

Deadline for receipt of
Form for Submission of a Paper (Form B) and
copy of contributed paper through official channels **28 June 2004**

Deadline for receipt of Grant Application Form
(Form C) (if applicable) through official channels **28 June 2004**

16. CONTACT INFORMATION

The following persons may be contacted for further information or assistance:

(a) Scientific issues — Scientific Secretariat (IAEA)

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(b) Administrative issues — Symposium Organizer (IAEA)

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17. SYMPOSIUM WEB PAGE

Please visit the IAEA symposium web site regularly for any new and/or updated information regarding this symposium under:

<http://www-pub.iaea.org/MTCD/Meetings/Announcements.asp?ConfID=124>