

Technical Meeting on Remediation Strategies and Long Term Management of Radioactive Waste after Accidental Radioactive Releases to the Environment

20th anniversary of the Goiânia accident

Mendes Convention Center Santos, SP, Brazil 3–5 October 2007

In cooperation with the Brazilian National Nuclear Energy Commission (CNEN)

and the Spanish Nuclear Safety Council (CSN)

1. BACKGROUND

The Goiânia accident of 13 September 1987 contaminated the environment and exposed the local community to ionizing radiation. An international workshop was held in September 1994 in Brazil that used the Goiânia accident as a basis for discussion of approaches to decision making after accidental releases of radioactive material. Although environmental aspects were discussed, the focus of the 1994 workshop was mainly on the dosimetric, decontamination and medical aspects of the accident. The long term consequences of the accident, such as environmental impacts and management of radioactive waste arising from remedial actions, were not addressed. In the intervening two decades, following a series of accidents involving the release of radioactivity to the environment, much has been learned about the management of the long term consequences of such accidents. The International Commission on Radiological Protection (ICRP) has developed Safety Requirements for remediation of areas contaminated by past practices and accidents and a Safety Guide entitled *Application of the Concepts of Exclusion, Exemption and Clearance*. It is now timely to review the lessons learned in the management of long term impacts. This experience can be used to better delineate preparedness plans in terms of remediation of urban and natural environments and in terms of radioactive waste management.

2. OBJECTIVE

The objective of the meeting is to:

- Create awareness among interested parties of the concepts and ideas that form the basis for the long term planning and management of consequences of accidental releases of radioactivity to the environment:
- Provide an international forum for their discussion: and
- Work towards an internationally harmonized basis for remediation strategies and radioactive waste management policies that provide for high levels of long term safety.

3. SCOPE OF THE MEETING

The main topics to be covered will be the strategies to prioritize and optimize remediation of urban and natural environment contaminated with radioactive materials, and strategies and means to minimize radioactive waste produced by such accidents. Preparedness for remediation, knowledge of the radioecological sensitivity of the environment, tools to assess contamination of urban environments and long term planning and management strategies for radioactive waste (conditioning, storage and disposal) will be the key topics discussed.

4. AUDIENCE

The target audience is government and industry representatives: senior policy makers, regulators and facility operators, and their technical experts. The meeting is directed at a broad spectrum of professional disciplines, including; radioactive waste management, radiation protection, environmental science mechanical and civil engineering, radiological assessment.

5. PROGRAMME

The meeting will be developed in three main topical sessions. The first two topical sessions will cover environmental remediation and radioactive waste management strategies. These sessions will be introduced by recognized experts and will include presentations for the relevant topics on lessons learned from past accidental radioactive releases. In each session, ample time for discussion will be provided and a Panel discussion will close each session and provide an opportunity for extensive exchange of views among all participants. The chairpersons will draw conclusions from the presentations and discussions. The third session will deal specifically with the different aspects of the Goiânia accident.

Poster sessions will be organized for the presentation of contributed papers and a closing session will summarize the principal observations made during the meeting.

6. CONTRIBUTED PAPERS AND POSTERS

Papers may be submitted as contributions to the meeting. Owing to the limited time available and the intention to provide time for discussion, it will not be possible to accept all the papers for oral presentation, but they will be provided in advance of the meeting. Authors of contributed papers are encouraged to present the substance of the paper in the form of a poster. Comments or questions on contributed papers can be raised at the appropriate topical session. **Deadline for submission of contributed papers is 31 August 2007.** The papers may be sent directly by email to the Scientific Secretary. Guidelines for the preparation and submission of contributed papers and posters will be provided upon request. The proceedings will be published as soon as possible after the meeting.

7. MEETING ARRANGEMENTS

The meeting is being organized by the IAEA and hosted by the Government of Brazil through the Brazilian National Nuclear Energy Commission.

All persons wishing to participate in the meeting must notify the IAEA Scientific Secretary through the competent national authority (Ministry of Foreign Affairs or national atomic energy authority). Participants whose designations have been received by the IAEA will be notified directly before the meeting.

As a general rule, the IAEA does not pay the cost of attendance. The costs for the organization of the meeting are borne by the IAEA and the Host Government. No registration fee is charged to participants.

The working language of the meeting will be English. All communications, including abstracts and contributed papers, must be sent to the IAEA in English.

Detailed information on accommodation and other administrative arrangements in Brazil will be provided by the contact person in Brazil. Participants who require a visa to enter Brazil should submit the necessary application to the nearest consular representative of Brazil as soon as possible.

The Scientific Secretary of the meeting is:

Mr. Didier Louvat Head, Waste Safety Section Division of Radiation, Transport and Waste Safety International Atomic Energy Agency PO Box 100, Wagramer Strasse 5 1400 Vienna, Austria

Tel: +43-1-2600-22666; Fax: +43-1-26007-22666 Email: <u>D.Louvat@iaea.org</u>

The contact person in Brazil is:

Ms. Patrícia Wieland Directorate for Radiation Protection and Nuclear Safety National Nuclear Energy Commission - CNEN Rua General Severiano No. 90 22290-901 Botafogo Rio de Janeiro Brazil

Tel: +55 (21) 2173 2107 Fax: +55 (21) 2173 2304 Email: <u>pwieland@cnen.gov.br</u>

Time	Wednesday 3 October	Thursday 4 October	Friday 5 October
09:00 - 09:30	Opening Brazil IAEA	SESSION 2 (Chair Brazil): Long term radioactive waste management after an accident Invited paper (ENRESA/Spain) Session 2 Case Studies Chernobyl (Ukraine)	SESSION 3 (Chair IAEA): The Goiânia accident. Main lessons learned 20 years after
9:30 - 10:30	SESSION 1 (Chair Spain): Planning Environmental Remediation in case of accident Invited paper (IRSN/France)		
10.30 - 11:00	Coffee Break	Coffee Break	Coffee Break
11:00 - 12.30	Session 1 Case Studies Chernobyl (Ukraine) Goiânia (Brazil) Juárez (Mexico) Acerinox + Palomares (Spain)	Session 2 Case Studies Goiânia (Brazil) Juárez (Mexico) Acerinox + Palomares (Spain)	Session 3 (cont'd.)
12.30 - 14:00	Lunch	Lunch	Lunch
14:00 - 15.30	Discussion	Discussion	Closing of the Workshop Brazil IAEA
15:30 - 16:00	Coffee Break	Coffee Break	
16:00 – 17.00	Discussion (cont'd.)	Discussion (cont'd.)	

PROVISIONAL PROGRAMME