

REPORT ON THE INTERNATIONAL CONFERENCE ON ISSUES AND TRENDS IN RADIOACTIVE WASTE MANAGEMENT

1. An International Conference on Issues and Trends in Radioactive Waste Management was held by the Agency, in co-operation with the European Commission and the Nuclear Energy Agency of the Organisation for Economic Co-operation and Development, in Vienna from 9 to 13 December 2002. It was presided over by Mr. Alec Baer of Switzerland. A summary of the findings of the Conference is provided in the following paragraphs.
2. At its outset, the Conference was made aware of the general progress that has been made in recent years towards the resolution of the problems in the radioactive waste management area. In particular, the progress towards establishing geological repositories for high-level radioactive waste in Finland and the USA was noted.
3. The entry into force of the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management was recognized as a “landmark” event - setting the stage for a process of systematic international improvement of waste management safety.
4. Long-term surface storage, as opposed to the final disposal of radioactive waste and spent nuclear fuel, is becoming a reality in many countries. This is occurring for various reasons, including: delays in final repository programmes; lack of resources; uncertainties about whether spent fuel should be considered a waste or a resource; lack of public acceptance of disposal; lack of political will to proceed with disposal. It was concluded that, in the long term, surface storage is unsustainable, because of the need to maintain institutional control to guarantee the safety of the storage facility. This is an important issue on which a clear, internationally agreed policy would be valuable.
5. A recurring issue was the problem of providing institutional mechanisms for the long-term safety of radioactive waste, especially for the waste types that are not isolated from the human environment, and of ensuring that knowledge of the existence of the waste and of the associated hazards is not lost.
6. Throughout the Conference, the need to involve concerned members of the public in national decisions related to radioactive waste management was emphasized. The discussions showed that solutions to waste management problems can rarely be achieved by purely technical means; social-political input is usually required. This theme is not new, but it was given particular stress in the Conference. It raises the question of the role of the Agency in this regard, and the extent to which the Agency, which is concerned principally with technical matters, can and should become involved in the resolution of social-political issues in the context of radioactive waste management.

7. Some more specific findings are set out in the following subparagraphs:

- (a) In some parts of the world, policies for the control of radioactive discharges to the environment are now being determined mainly by social and political factors. There is a danger that the policies are being developed without proper regard for broader waste management and energy supply implications.
- (b) It is generally recognized that the fundamental science and technology of deep geological disposal are well established. In many countries, the key issue in the process of establishing underground waste repositories is that of obtaining local acceptance of the siting of disposal facilities. Experience shows that, for local acceptance to be obtained, processes have to be established which allow locally concerned people to have a proper role in decision-making.
- (c) With the recent progress in some countries towards developing geological repositories for high-level waste, the time has come for the Agency to clarify the requirements for nuclear safeguards in this context.
- (d) To date, the main focus in the context of the problem of disused sealed sources has been on bringing them under regulatory control, but in the longer term it is necessary to provide for their safe disposal. The discussions in the Conference suggested that international action could be helpful in finding solutions to the problem - for example, by facilitating the return of sources to suppliers through the improvement of arrangements for their transportation between countries and by providing international guidance on the feasibility and safety of the borehole disposal option.
- (e) It has been recognized that significant radiation doses can arise from waste associated with industries other than the nuclear industry, mainly from waste containing naturally occurring radioactive materials (NORM). Different approaches to the regulation of the industries in question and to the disposal of the waste are being adopted. Improved coherence and consistency of approach is desirable, and international guidance may help, provided that it gives the flexibility necessary to allow for case-by-case solutions.
- (f) Radioactive waste from past activities and events exists in many countries. Recovery and remediation programmes are under way, but there is often debate concerning the most appropriate standards to apply. Standards based on health protection considerations are sometimes being rejected in favour of more restrictive standards influenced by public concern. The issue requires further consideration at the international level with the objective of having standards which will be universally applied.
- (g) Opinion polls show that the public's perception of the nuclear industry is heavily influenced by concern over radioactive waste. This situation will be changed only when the nuclear industry and its representatives have established, through

policies of openness and transparency, a convincing “track record” of responsiveness to the concerns of stakeholders.

- (h) An international regime for radioactive waste safety now exists, comprising a legally binding convention, a set of internationally agreed safety standards, and mechanisms to ensure compliance with the convention (a review process) and the standards (international peer review teams). Member States now need to work with the Agency in using those mechanisms to raise the levels of safety in radioactive waste management worldwide.