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Introductory Statement to the 3rd Scientific Forum during the 44th Session of the IAEA General Conference

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Radioactive Waste Management

by IAEA Director General Dr. Mohamed ElBaradei

Signs of Progress

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I am pleased to welcome all of you to the 3rd Scientific Forum. Our theme this year is "Radioactive Waste Management: Turning Options into Solutions."

The development of publicly accepted solutions to radioactive waste management is an issue central to the future of nuclear technology. Despite the agreement among most experts that geological disposal can be safe, technologically feasible, and environmentally sound, the public at large remains sceptical.

Signs of Progress

Several signs of progress have been evident at major international conferences over the past year. Waste management and disposal technologies continue to improve. Countries are committed to strengthening the international framework on the safety of radioactive waste management. And the international community is increasingly focused on addressing the disparity between technological feasibility and public perceptions.

These points are beginning to influence the international dialogue. At this Scientific Forum, we have brought together technical experts, policy-makers, and other concerned constituents to build on these points, to share experience and perspectives, and to focus on concrete methods of meeting the challenges that lie ahead.

Global Challenges

While our perspective must cover the entire spectrum of wastes, a dominant factor remains the steady rise in high level waste volumes, in the absence of disposal facilities. Our fundamental challenge is to accelerate and sustain progress toward demonstrated solutions.

The solution generally proposed is the use of deep geological repositories, with a combination of natural barriers and engineered systems to provide physical and chemical waste containment. In most countries, siting a repository has proven difficult. The public continues to have fears about safety, lack of confidence in the technology, and lack of knowledge about the options. Other hurdles include locating sites with the appropriate geological make-up, establishing appropriate statutory and regulatory mechanisms, and sustaining the political support necessary for progress.

A number of countries have taken concrete steps toward designing and constructing disposal facilities. Some, such as Belgium, Canada, France, Japan, Russia, and the United States, are developing underground research facilities. Research and development is continuing on new techniques to minimize actinide generation and achieve transmutation of long lived wastes. Research is also proceeding on methods of retrieving wastes that have been placed in geological depositories, in case future safety concerns arise or a better solution is developed.

International Co-operation

The Agency carries out a range of activities to facilitate technology transfer and information exchange. These activities include international symposia on waste safety and technology, co-ordinated research projects, and publication of reports on the latest achievements. On request, we organize peer reviews of national radioactive waste management programmes — as we have done in the Czech Republic, Finland, Sweden, the United Kingdom, and the United States.

Second, we give special attention to developing consensus norms and standards on waste management. The Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management is on the verge of ratification. The Agency is working to build international consensus on safety standards for geological disposal and other waste areas.

Third, we are focusing on how best to apply the Agency's safeguards system to the geological disposal of waste containing relevant nuclear material. A multinational Member State support programme has been launched to ensure that safeguards systems developed for spent fuel disposal meet Agency safety and safeguards objectives, optimize resources, and make the best use of existing technologies.

Building a Stronger Framework

The recent IAEA Conference in Córdoba, Spain, emphasized that effective national strategies for waste disposal would require a detailed, transparent approach that would enable all parties to participate in the decision making process. This forum is designed to build on the conclusions of the Córdoba Conference, and to serve in itself as an example of constructive dialogue among regulators, policy makers, operators, researchers, and public interest organizations. I look forward to the Forum report, which will summarize your views and recommendations and will be conveyed to the plenary of the General Conference. Also, as I stated yesterday, support is growing for a global forum on nuclear waste with the participation of all concerned parties, including policy makers, civil society and the media, with a

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view to building an international consensus on this important issue. My intention is to establish such a forum, and naturally I would welcome your views in this regard.

We are pleased to have as our chair of this Scientific Forum, Dr. Shirley Jackson, the President of Rensselaer Polytechnic Institute in the United States. Dr. Jackson is a former Chairman of the US Nuclear Regulatory Commission, and a former scientist at AT&T Bell Laboratories. With her background in industry, government and academics, she is especially qualified to chair these sessions.

With these remarks I hereby open the 3rd Scientific Forum, and turn the podium over to Dr. Jackson.