Challenges faced by South Africa for the establishment of a National Radioactive Waste Disposal Institute

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INTRODUCTION

In 2005, the Government of South Africa approved a Policy and Strategy on Radioactive Waste Management. This policy provides a framework in relation to government's thinking on Radioactive Waste Management. It outlines, among other things, policy principles and sets out the relationship between government, regulatory bodies, operators, and generators of radioactive waste.

INTRODUCTION

The responsibilities for Radioactive Waste Management have thus far been carried out by the South Africa Nuclear Energy Corporation (Necsa). Necsa manages and operates a repository called Vaalputs which is located in the Northern Cape province of South Africa. Low and intermediate waste generated at Koeberg Nuclear Power Station is sent to this facility. Spent fuel from Koeberg is stored in the spent fuel waste storage facility in-situ and other facilities at Koeberg.

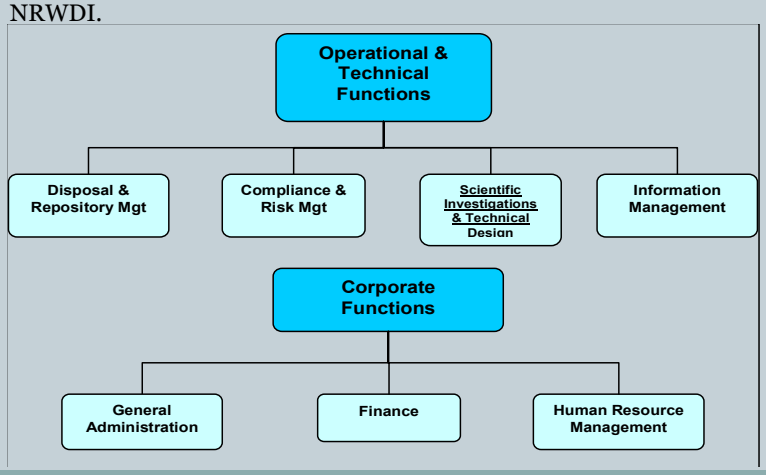
LEGISLATIVE MANDATE

The National Radioactive Waste Disposal Institute was established by and act of Parliament in Act No. 53 of 2008. The act was signed by the President and assented to on 5 January 2009.

The Institute is an independent entity established by statute to fulfill the institutional obligations of the Minister to manage the disposal of radioactive waste on a national basis. It thus obtains its mandate from and reports to the Minister via the Chief Executive Officer (CEO) and Board of Directors (BOD) of the Institute. The Institute will have a ring-fenced budget allocated by DoE based on funds sourced from the National RWM Fund as controlled and approved by the National Treasury and/or from other DoE allocations as appropriate.

PROPOSED FUNCTIONAL STRUCTURE

The following *Operational and Technical* structure has been proposed for the NRWDI.



FINANCIAL PROVISION

The National Radioactive Waste Management Policy states that government shall establish a Radioactive Waste Management Fund by statute. In accordance with the "polluter pays principle", the contributions of the fund will be sourced from the generators of radioactive waste. The contributions shall be managed in an equitable manner without cross-subsidisation and based on the classification of waste as well as the waste volumes.

Each of the generators shall enter into an agreement with the RWMF for managing long-term provisions for institutional control measures.

CORPORATE GOVERNANACE MATTERS

With specific reference to the NRWDI and its mandate as outlined in the Act, the following requirements outline what ought to be important aspects of good corporate governance for the Institute:

- Good corporate governance must ensure the implementation of radioactive waste management principles developed by the IAEA, and contained in the Radioactive Waste Management Policy and Strategy of South Africa.
- Good corporate governance must ensure the implementation of systems and controls that promote service delivery in line with the principles of Batho Pele, including efficiency, effectiveness, ethics and equity.

CORPORATE GOVERNANACE MATTERS

- Good corporate governance must enable the effective identification, understanding and management of risk to all elements of the organisational, business and service delivery objectives.
- Good corporate governance should address / balance the entity's social and environmental responsibilities in addition to its core financial or economic corporate sustainability requirements.
- Corporate governance in the public sector must reflect government's objectives as outlined in, inter alia: the Medium Term Strategic Objectives (MTSOs), State of the Nation Address (SONA), Accelerated and Shared Growth Initiative (ASGISA) and the key focus areas (KFAs) of the relevant functions of the Executive Authority.

TRANSITION ARRANGEMENTS

It is also recommended that the transition commence with the following activities:

- Revise the nuclear license for Vaalputs to accommodate the new arrangement.
- Develop an integrated management system for the Institute.
- Liaise with academic institutions regarding capacity building and their availability / willingness to participate in future R&D projects.

TRANSITION ARRANGEMENTS

- Develop a national radioactive waste management database.
- Obtain a resolution regarding the current arrangement with Koeberg.
- Negotiate arrangements with Necsa to manage the transition.
- Develop a financial model for determining the unit disposal cost (R/m^3).

CHALLENGES

- Is the distinction between waste management/storage and disposal significant? Is the Institute limited to disposal or will its jurisdiction extend into other areas of waste management?
- Is there any potential overlaps in functions of the Institute, NECSA and the NNR and the Department of Health's Radiation Control Directorate?
- Does the Act fully cover the functions of the Institute?
- Should some functions be added or should some be taken away?

CHALLENGES

- Is it necessary to phase the implementation of the Institute, or are operations small enough to implement in one action?
- It would be necessary to review the approach to Research and Development activities as these were scaled down in the past years.
- Capacity for the relevant managerial, scientific, and technical skills may not be readily available.
- The existing infrastructure of Vaalputs has undergone ageing and has not kept pace with the latest technology.

CHALLENGES

- The present cost recovery amount for disposal costs is underestimated
- Concerns of environmental NGO's would also need to be taken into account in the future planning.
- Initial start-up costs for the financial year 2010/2011 are estimated to be R 51.5 million. The statute to ensure that funding must be channel to the Disposal institute must still be published.

CONCLUSION

- Preparations are underway for the establishment the Disposal Institute in South Africa.
- The challenges at the moment are not insurmountable but require deliberation.
- South Africa has also proposed using Bi-laterals as a means of sharing information.
- Most of the key building blocks are in place for the formation of the Radioactive Waste Management Organisation.

Closure

Thank-you for your attention!!!