

Senate Legal and Constitutional Affairs Legislation Committee
Inquiry into the National Radioactive Waste Management Bill 2010
Submission by the Australian Radiation Protection and Nuclear Safety Agency

Introduction

The Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) does not propose to comment on the specific matters enumerated in the Terms of Reference for this Inquiry.

The purpose of the ARPANSA submission is to set out its role in relation to any future facilities proposed to be established by the Australian Government pursuant to the National Radioactive Waste Management Bill 2010 if enacted.

ARPANSA's Role

The Chief Executive Officer of ARPANSA is part of the Australian Government and is charged under the *Australian Radiation Protection and Nuclear Safety Act 1998* with responsibility for protecting the health and safety of people, and the environment, from the harmful effects of radiation (ionising and non-ionising).

The legislative framework is set out at:

<http://www.arpansa.gov.au/Regulation/Legislation/index.cfm>

Australian Government Regulator

A principal function of the CEO of ARPANSA is to regulate the government's safe use of radiation including radioactive material and nuclear facilities.

The scope of the facilities that ARPANSA regulates includes; a controlled facility, being a nuclear waste storage facility that contains radioactive material greater than a specified amount, and similarly a facility for the disposal of radioactive waste.

Any facilities mentioned in the National Radioactive Waste Management Bill 2010, if the Bill is enacted, will be the subject of regulatory oversight by ARPANSA including the following activities:

- To prepare a site for the controlled facility
- To construct the controlled facility
- To operate the controlled facility
- To possess or control the controlled facility
- To decommission, dispose of or abandon a controlled facility

Controlled facilities that are characterised as nuclear installations have a mandatory public submission process as part of the licence application process.

In addition, the CEO of ARPANSA when making a licence decision in relation to any of the above licence applications must take into account international best practice in radiation protection and nuclear safety.

ARPANSA has developed regulatory guidance material relevant to the proposed facilities entitled "Regulatory Guidance for Radioactive Waste Management Facilities: Near Surface Disposal Facilities; and Storage Facilities" (2006). This guidance is intended to be used in relation to applications made under the *ARPANS Act 1998* for a facility licence to prepare a site for, to construct, or to operate radioactive waste management facilities, being; a radioactive waste disposal facility (near surface), or a radioactive waste store. The regulatory guidance is directed at radioactive waste management facilities that involve an inventory of radionuclides that would qualify as nuclear installations under section 13 of the ARPANS Act.

National Uniformity

One of the functions of the CEO of ARPANSA is to promote uniformity of radiation protection and nuclear safety policy and practices across all jurisdictions. ARPANSA publishes Codes of Practice and associated recommendations and guidance materials for radiation protection and nuclear safety including the management of radioactive waste. These Codes, Recommendations and guidance also provide the framework in which any applications for facilities for the management of radioactive waste would be considered.

Contracting Party to the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management

ARPANSA coordinates Australia's involvement in Joint Convention activities including preparations for the triennial review meetings.

The objectives of the Joint Convention are:

- (i) To achieve and maintain a high level of safety worldwide in spent fuel and radioactive waste management, through the enhancement of national measures and international cooperation, including, where appropriate, safety-related cooperation;
- (ii) To ensure that during all stages of spent fuel and radioactive waste management there are effective defences against potential hazards so that individuals, society, and the environment are protected from the harmful effects of ionizing radiation now and in the future, in such a way that the needs and aspirations of the present generation are met without compromising the ability of future generations to meet their needs and aspirations; and
- (iii) To prevent accidents with radiological consequences and to mitigate their consequences should they occur during any stage of spent fuel or radioactive waste management.

The following is a link to the IAEA's website for the Joint Convention (<http://www-ns.iaea.org/conventions/waste-jointconvention.htm>) which includes the text of the convention and Australia's National Report to the third Review Meeting held in 2009.

The obligations of the Contracting Parties with respect to the safety of spent fuel and radioactive waste management are based to a large extent on the principles contained in the IAEA Safety Fundamentals document "The Principles of Radioactive Waste Management", published in 1995. They include, in particular, the obligation to establish and maintain a legislative and regulatory framework to govern the safety of spent fuel and radioactive waste management and the obligation to ensure that individuals, society and the environment are adequately protected against radiological and other hazards, inter alia, by appropriate siting, design and construction of facilities and by making provisions for ensuring the safety of facilities both during their operation and after their closure. The Joint Convention imposes obligations on Contracting Parties in relation to the transboundary movement of spent fuel and radioactive waste based on the concepts contained in the IAEA Code of Practice on the International Transboundary Movement of Radioactive Waste. Also, Contracting Parties have the obligation to take appropriate steps to ensure that disused sealed sources are managed safely.

The Joint Convention review meetings have highlighted increased establishment of national radioactive waste management organisations and expectations of comprehensive plans for storage, which is by nature temporary, and ultimate disposal activities. A summary report on the third Review Meeting of the Joint Convention held in May 2009 can be downloaded from: <http://www.arpansa.gov.au/Regulation/Collaborations/jointconv.cfm>