



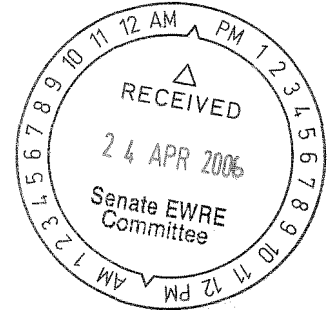
Australian Government

Australian Radiation Protection and Nuclear Safety Agency

20 April 2006

Ref.: S2006/00170

Mr John Carter
Secretary
Senate Employment, Workplace Relations and Education Committee
Department of the Senate
Parliament House
Canberra ACT 2600



Dear Mr Carter,

Inquiry into the provisions of the Australian Nuclear Science and Technology Organisation Amendment Bill 2006

I refer to the above Inquiry and wish to make the following submission as the CEO of the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA).

Background:

Under the *Australian Radiation Protection and Nuclear Safety Act 1998* (the ARPANS Act), ARPANSA:

1. regulates the safe use of radioactive material and nuclear installations by Commonwealth entities and Commonwealth contractors;
2. promotes uniformity of radiation protection and nuclear safety policy and practices across jurisdictions of the Commonwealth, the States and the Territories;
3. provides advice and services on radiation protection, nuclear safety and related issues.

Issues addressed in this submission:

The following issues relate to functions under the ARPANS Act and provisions of the Australian Nuclear Science and Technology Organisation Amendment Bill 2006 ('the Bill'):

1. regulation of radioactive material and radioactive waste possessed or controlled by the Australian Nuclear Science and Technology Organisation as a result of the operation of the Bill;
2. national approach to recovery and storage of hazardous radioactive material arising from the use of a radiological dispersal device (RDD); and
3. pre-disposal management of the Australian Government's radioactive waste.

Regulation:

The activities covered in Item 7 of the Bill would be subject to regulation under the ARPANS Act and require establishment of any new controlled facilities (such as a nuclear waste storage

facility or a facility for storing high activity unsealed or sealed radioactive sources) and dealing with any new controlled material (for example a seized radioactive sources intended to be used in a radiological disposal device or contaminated debris arising from the detonation of an RDD) to be either covered under an existing licence or the subject of a new licence.

Compliance with the Act and licence conditions is monitored via mandatory licence holder reporting, routine and 'short notice' inspections and potential incident investigations.

The Australian Nuclear Science and Technology Organisation (ANSTO) is currently licensed to operate a store for research reactor spent fuel prior to it being sent overseas for disposal or reprocessing. It is also licensed to operate a separate facility to condition and store radioactive waste generate by the Organisation.

National approach to RDD contaminated material recovery and storage:

In June 2004, the New South Wales State Emergency Management Committee wrote to the CEO ARPANSA regarding the State's ability to handle store and dispose of material resulting from the malevolent use of radioactive material. The letter raised a number of issues including that:

- the terrorist release of radioactive material in an urban area would require the full recovery and removal of all radioactive material;
- while NSW Police Forensic would take initial custody of the material for forensic investigation, NSW Police have no approved facilities for the temporary storage or longer term disposal of radioactive material;
- while ANSTO had appropriate storage facilities, the ANSTO Act currently places restrictions on the acceptance of non-ANSTO or Australian Government radioactive waste;
- NSW could not identify alternative arrangements for temporary storage of radioactive material within the State; and
- other States would face similar problems, and that the issue needed to be addressed at the Commonwealth level.

In July 2004, ARPANSA's Radiation Health Committee formed a Working Group to prepare a discussion paper to examine the current national and international thinking on decontamination, clean-up criteria/remediation and waste storage and disposal following the clean-up of an area affected by radiological incident.

Access to the ANSTO facility for temporary storage of radioactive material would strengthen national arrangements for minimizing the public health and environmental impacts from an RDD incident. The proposed amendments to the *Australian Nuclear Science and Technology Organisation Act 1987* would allow ANSTO to accept material from a RDD incident within Australia, in order to condition, manage or for temporary storage of the radioactive material at the request of a law enforcement or emergency management agency. Following suitable treatment, this radioactive waste material may be suitable for long term storage or disposal in the Commonwealth Radioactive Waste Management Facility.

Pre-disposal management of the Australian Government's radioactive waste:

Radioactive waste is held in Australia at a variety of Government and non-Government premises. Much of this waste has been stored for many years and will require conditioning before it can be sent for long term storage or disposal. The Radiation Health Committee is developing a Code of Practice and Safety Guide for the predisposal management of

radioactive waste, which discusses the conditioning of radioactive waste for long term storage and/or disposal.

It is my intention to seek to apply these national requirements for pre-disposal management to Commonwealth entities when they are completed.

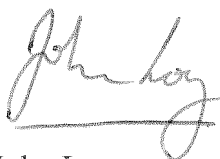
ANSTO has developed suitable facilities for the conditioning of radioactive waste, however, as indicated, these facilities are currently not able to be made available to other Australian Government organisations. If ANSTO were able to offer these facilities, presumably on a fee for service basis, this would obviate the need to replicate such expensive facilities at other places. For this to occur, ANSTO would have to be able to store other user's waste temporarily on the ANSTO site. A process to allow complete pre-disposal management of the Commonwealth's holdings of radioactive wastes will enhance radiation protection in Australia.

Conclusion:

I believe the Bill has merit and is capable of delivering worthwhile benefits to the community.

I am available to appear before the Committee if required.

Yours sincerely

A handwritten signature in cursive script, appearing to read 'John Loy', with a horizontal line underneath.

John Loy
CEO of ARPANSA