### The Senate

# Standing Committee on Environment, Communications and the Arts

Commonwealth Radioactive Waste Management (Repeal and Consequential Amendment) Bill 2008

© Commonwealth of Australia 2008 ISBN 978-1-74229-033-1		

This document was printed by the Senate Printing Unit, Parliament House, Canberra

## **Committee membership**

#### Members

Senator Anne McEwen (ALP, SA) (Chair)

Senator Simon Birmingham (LP, SA) (Deputy Chair)

Senator the Hon. Ron Boswell (NATS, QLD) (from 15 October 2008)

Senator Scott Ludlam (AG, WA)

Senator Kate Lundy (ALP, ACT)

Senator Stephen Parry (LP, TAS) (to 24 November 2008)

Senator Louise Pratt (ALP, WA)

Senator the Hon. Judith Troeth (LP, VIC) (from 24 November 2008)

Senator John Williams (NP, NSW) (to 15 October 2008)

Senator Dana Wortley (ALP, SA)

### Participating members participating in this inquiry

Senator the Hon. Ian Macdonald (LP, QLD)

#### Committee secretariat

Dr Ian Holland, Secretary Ms Sophie Dunstone, Senior Research Officer Mrs Dianne Warhurst, Executive Assistant

#### Committee address

PO Box 6100

Parliament House

Canberra ACT 2600

*Tel*: 02 6277 3526 *Fax*: 02 6277 5818

Email: eca.sen@aph.gov.au

Internet: http://www.aph.gov.au/senate/committee/eca\_ctte/index.htm



# **TABLE OF CONTENTS**

Committee membershipiii		
Chapter 1 - Introduction	1	
Referral to the Committee	1	
Radioactive Waste	1	
Radioactive waste management in Australia	2	
Commonwealth Radioactive Waste Management Act 2005	4	
Commonwealth Radioactive Waste Management Legislation Amend Act 2006		
The Commonwealth's role	6	
The bill currently before the committee: Commonwealth Radioactive Waste Management (Repeal and Consequential Amendment) Bill 20		
Chapter 2 - Radioactive waste: issues with the existing legislation	ı9	
Problems with the existing legislation and site selection process	10	
The Commonwealth overrules the Northern Territory	14	
The existing law is procedurally unfair	16	
The Muckaty Pastoral Lease site nomination	18	
Waste minimisation and the Lucas Heights reactor	26	
Chapter 3 - Radioactive waste: a new policy framework	29	
Innovation in waste management and international practice	29	
A new policy framework	33	
Coalition Senators - Additional Comments/Dissenting Report	37	
Additional Comments - Senator Scott Ludlam	43	

Appendix 1 - Submissions, Tabled Documents and Additional Information	
Submissions	49
Tabled Documents	51
Additional Information	52
Appendix 2 - Public Hearings	53

# **Chapter 1**

### Introduction

### Referral to the Committee

- 1.1 On 25 September 2008, the Senate referred the Commonwealth Radioactive Waste Management (Repeal and Consequential Amendment) Bill 2008 (hereafter 'the bill') to the Senate Environment, Communications and the Arts Committee for inquiry and report by 10 November 2008. On the 14th October 2008, the Senate granted an extension of time to report until Thursday, 4 December 2008, and a further extension of time to report, until Thursday, 18 December 2008.
- 1.2 The committee advertised the inquiry in the *Australian* newspaper, and placed details of the inquiry on the committee's website. The committee also wrote to a number of organisations and stakeholder groups inviting written submissions by 31 October 2008.
- 1.3 The committee received submissions from 103 individuals, groups and organisations, as listed at Appendix 1. The committee held public hearings in Alice Springs on Monday 17 November and Tuesday 18 November 2008, as well as in Canberra on Friday 28 November 2008. A list of those who gave evidence at this hearing is at Appendix 2. The committee thanks Australian Nuclear Science and Technology Organisation (ANSTO) for its assistance with the inquiry, including facilitating a visit by committee members to its Lucas Heights facility. The committee thanks all those who assisted with its inquiry.

### **Radioactive Waste**

- 1.4 Australia has an inventory of radioactive waste that has arisen from uranium mining and processing operations, research activities, and from ANSTO's reactor operations at Lucas Heights in New South Wales. Almost all new radioactive waste has its origins at Lucas Heights.
- 1.5 Radioactive waste in Australia is classified in different ways that recognise that waste:
- Comes in different physical forms;
- Emits different types of radiation (alpha, beta or gamma radiation); and
- Will be radioactive for different periods of time.

Australian Radiation Protection and Nuclear Safety Authority, Radioactive Waste Management fact sheet, <a href="http://www.arpansa.gov.au/radiationProtection/factsheets/is\_waste.cfm">http://www.arpansa.gov.au/radiationProtection/factsheets/is\_waste.cfm</a> (accessed 10 December 2008)

1.6 The table below sets out the classification scheme used by the International Atomic Energy Agency (IAEA), and which is used to distinguish between the types of waste which the Australian government is considering for a waste disposal facility (low level waste, and short-lived intermediate level waste), and for a separate storage facility (long lived intermediate level waste).

### Summary of the IAEA Classification of Radioactive Waste<sup>2</sup>

Waste Type	Definition
Exempt waste	Activity levels at or below clearance levels
Low Level waste	Activity levels above clearance levels. Contains enough radioactive material to require action for the protection of people, but not so much that it requires shielding in handling, storage or transportation.
Short-lived Intermediate Level Waste	Waste that requires shielding, but needs little or no provision for heat dissipation, and contains low concentrations of long-lived radionuclides (less than 4000 Bq/g of alpha emitters). Radionuclides generally have a half-life of less than 30 years.
Long-lived Intermediate Level Waste	Waste that requires shielding, but needs little or no provision for heat dissipation. Concentrations of long-lived radionuclides (which generally have a half-life of greater than 30 years) exceed limitations for short lived waste.
High Level Waste	Waste which contains large concentrations of both short and long-lived radioactive nuclides, and is sufficiently radioactive to require both shielding and cooling. It generates more than two kilowatts per cubic metre of heat.

1.7 Australia's nuclear reactors have all been small research reactors. While their spent fuel rods when initially removed from the reactor core generate heat equivalent to that of high level waste, by the time they have been cooled and are ready for treatment as radioactive waste, they fall into the category of long lived intermediate level waste.

### Radioactive waste management in Australia

1.8 Radioactive waste management in Australia has a long history.<sup>3</sup> The process of identifying a site for storage or disposal of Australian radioactive waste began in

Australian Radiation Protection and Nuclear Safety Authority, Radioactive Waste Management fact sheet, <a href="http://www.arpansa.gov.au/radiationProtection/factsheets/is\_waste.cfm">http://www.arpansa.gov.au/radiationProtection/factsheets/is\_waste.cfm</a> (accessed 10 December 2008)

1978, when a meeting of Commonwealth, State and Territory Health Ministers, the State and Territory Ministers agreed to ask the Commonwealth to co-ordinate a national approach to the management of radioactive waste.<sup>4</sup>

- 1.9 In 1985, a Commonwealth-State Consultative Committee on Radioactive Waste Management recommended that a 'national program be initiated to identify potentially suitable sites for a national near-surface radioactive waste repository'. A national project to develop a site for disposal of low level and short-lived intermediate radioactive waste began in 1992. This process resulted in 2003 in the selection of a site for the facility in South Australia, known as Site 40a, which the Commonwealth acquired under the *Lands Acquisition Act 1989*.
- 1.10 South Australia launched a legal challenge against this site choice, and on 24 June 2004, 'the Full Court of the Federal Court of Australia quashed the Commonwealth's land acquisition, ruling that the Commonwealth had misused the urgency provisions of the [Lands Acquisition Act] in acquiring Site 40a'.<sup>7</sup>
- 1.11 Following this decision, on 14 July 2004, the Prime Minister announced that the joint Commonwealth-State process would be abandoned. The government indicated that it 'will be examining sites on Commonwealth land, both onshore and off shore, for the establishment of a suitable facility' to take wastes that were the Commonwealth's responsibility, while leaving states and territories to manage their wastes:<sup>8</sup>

The Australian Government is committed to taking responsibility for the safe and secure disposal of its low level waste.

- Ian Holland and Matthew James, *Radioactive waste and spent nuclear fuel management in Australia*, Background Note, Department of the Parliamentary Library, January 2008, <a href="http://www.aph.gov.au/library/pubs/bn/2007-08/RadioactiveWaste.htm">http://www.aph.gov.au/library/pubs/bn/2007-08/RadioactiveWaste.htm</a> (accessed 1 December 2008).
- 4 'National dump to take all nuclear waste', *The Australian*, 28 June 1978.
- Department of Primary Industries and Energy, *National Radioactive Waste Repository Site Selection Study, Phase 2, Report on Public Comment*, AGPS, Canberra, 1995.
- Department of Resources, Energy and Tourism, 'The former National Radioactive Waste Repository and National Radioactive Waste Store projects', <a href="http://www.ret.gov.au/resources/Documents/radioactive\_waste/national\_repository\_and\_store\_history.pdf">http://www.ret.gov.au/resources/Documents/radioactive\_waste/national\_repository\_and\_store\_history.pdf</a> (accessed 20 October 2008).
- Department of Resources, Energy and Tourism, 'The former National Radioactive Waste Repository and National Radioactive Waste Store projects', <a href="http://www.ret.gov.au/resources/Documents/radioactive\_waste/national\_repository\_and\_store\_history.pdf">http://www.ret.gov.au/resources/Documents/radioactive\_waste/national\_repository\_and\_store\_history.pdf</a> (accessed 21 October 2008); State of South Australia v Honourable Peter Slipper MP [2004] FCAFC 164.
- 8 The Hon. John Howard, 'Radioactive waste management', Media Release, 14 July 2004.

The states and territories now have a responsibility to do the same in relation to their waste and as a matter of priority.<sup>9</sup>

1.12 The Commonwealth then commenced a process for choosing a Commonwealth Radioactive Waste Management Facility, and specified that it would be on Commonwealth land. In July 2005, 'the Government announced that it would proceed with its waste management policy by investigating three Commonwealth sites in the Northern Territory'. Two pieces of legislation were passed by Parliament supporting that process: the *Commonwealth Radioactive Waste Management Act 2005* and the *Commonwealth Radioactive Waste Management Legislation Amendment Act 2006*. The bill currently before the committee effectively seeks to repeal these pieces of legislation.

### **Commonwealth Radioactive Waste Management Act 2005**

1.13 The main legislation that is addressed by the current bill was introduced in 2005. It is the *Commonwealth Radioactive Waste Management Act 2005* (hereafter the Act). The objective of this legislation is:

To strengthen the Commonwealth's legal ability to develop and operate the proposed Commonwealth radioactive waste management facility in the Northern Territory. The Bill achieves this by:

- providing legislative authority to undertake the various activities associated with the proposed facility
- overriding or restricting the application of laws that might hinder the facility's development and operation, and
- providing for the acquisition or extinguishment of rights and interests related to land on which the facility may be located. 11
- 1.14 The 2005 legislation was introduced in part as a response to the Northern Territory's *Nuclear Waste Transport, Storage and Disposal (Prohibition) Act 2004*, which made it an offence in the Northern Territory to 'construct or operate a nuclear waste storage facility', or to transport nuclear waste into the Northern Territory.<sup>12</sup> At the time of the introduction of the 2005 legislation, the government responded to the Territory's action by commenting:

A number of existing State and Territory laws purport to prohibit or regulate the things the Commonwealth may do to establish and operate a

<sup>9</sup> The Hon John Howard, 'Radioactive waste management', *Media Release*, 14 July 2004.

The Hon. Dr Brendan Nelson, Minister for Education, Science and Training, 'Responsible management of radioactive waste in Australia', Media Release, 15 July 2005, MIN 1157/05, <a href="http://www.dest.gov.au/Ministers/Media/Nelson/2005/07/n1157150705.asp">http://www.dest.gov.au/Ministers/Media/Nelson/2005/07/n1157150705.asp</a> (retrieved 20 October 2008).

<sup>11</sup> Commonwealth Radioactive Waste Management Bill 2005 *Bills Digest*.

<sup>12</sup> Nuclear Waste Transport, Storage and Disposal (Prohibition) Act 2004, ss 6 and 7.

facility and/or transport radioactive material. States and Territories jurisdictions may introduce further legislation purporting to prohibit, regulate or hinder the Commonwealth doing these things.

Notwithstanding any State or Territory legislation, the Bill provides the Commonwealth with the express authority to do anything necessary for, or incidental to, establishing or operating a Commonwealth facility at the selected site, and transporting radioactive waste to the facility.<sup>13</sup>

The 2005 legislation limited or suspended the operation of a range of 1.15 Commonwealth legislation, including the Aboriginal Land Rights Act 1976, the Aboriginal and Torres Straight Islander Heritage Act 1984, and the the Native Title Act 1993.

### Commonwealth Radioactive Waste Management Legislation Amendment Act 2006

- The 2005 legislation envisaged the possibility that Indigenous traditional 1.16 owners, through a Northern Territory Land Council, might wish to nominate a potential site or sites. 14 In 2006 the government introduced a bill, the Commonwealth Radioactive Waste Management Legislation Amendment Bill 2006, to facilitate such nominations. It did so by:
- creating a process whereby the land on which a facility was sited could be handed back to traditional owners:
- exempting the process of such nominations from the application of the Administrative Decisions (Judicial Review) Act 1977; and,
- in the case of nominations put forward by a Land Council, stating that a failure to follow full consultation processes would not invalidate a nomination. 15
- In May 2007, the Northern Land Council nominated a site for consideration under the Act, and on 27 September 2007, the Minister for Education, Science and Technology, the Hon Julie Bishop, accepted that nomination. 16 The site, 120 kilometres north of Tennant Creek on Muckaty Pastoral Lease in the Northern Territory, became the fourth site under consideration, together with the three identified by the Commonwealth in 2005.

15

Commonwealth Radioactive Waste Management Legislation Amendment Bill 2006 Bills Digest.

<sup>13</sup> Commonwealth Radioactive Waste Management Bill 2005 Explanatory Memorandum.

<sup>14</sup> Commonwealth Radioactive Waste Management Act 2005, s.3A...

<sup>16</sup> The Hon Julie Bishop, 'Approval of radioactive waste facility site nomination', Media Release, 27 September 2007, http://www.dest.gov.au/Ministers/Media/Bishop/2007/09/B001270907.asp# (accessed 20 October 2008).

The Northern Territory government remains opposed to the Commonwealth's 1.18 current legislative regime. 17 and has stated:

The Northern Territory government maintains that the location of a [nuclear waste management facility] should be based upon independent and objective scientific advice on the most appropriate site or sites, wherever that site may be in Australia and not because of political expediency. 18

1.19 The committee understands that all four sites remain under consideration by the Commonwealth. The Minister for Resources and Energy, the Hon. Martin Ferguson MP has, in correspondence to one of the traditional owners of Muckaty Pastoral Lease, indicated the government's position:

I am currently considering an appropriate way forward to achieve a comprehensive, national approach to radioactive waste management. No decisions on radioactive waste management will be taken by me or the Australian Government without appropriate consultation. In particular, no decision has been made regarding the use of land on Muckaty Station for a waste facility. I have noted the various views of the Muckaty traditional owner groups and will consider them all in developing the Government's radioactive waste management strategy.<sup>19</sup>

### The Commonwealth's role

- The Commonwealth generates the majority of new radioactive waste, through 1.20 the Australian Nuclear Science and Technology Organisation's (ANSTO) reactor operations at Lucas Heights. It is also responsible for much of the historical waste, particularly low level waste generated by past research activity of the CSIRO. All states and territories also have responsibility for smaller amounts of radioactive waste, including ongoing generation of small amounts of waste from nuclear medicine.
- The Commonwealth's constitutional capacity to make decisions regarding radioactive waste within territories is based on the territories power.<sup>20</sup> Its power to deal with radioactive waste within state jurisdictions may be based in part on the external affairs power,<sup>21</sup> as Australia is a signatory to the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, which entered into force in Australia on 3 November 2003.<sup>22</sup> This

21

<sup>&#</sup>x27;Henderson urges PM to dump nuke waste law', Northern Territory News, 8 August 2008. 17

<sup>18</sup> Northern Territory government, Submission 81, p. 3.

<sup>19</sup> Correspondence to Ms Dianne Stokes, 22 Jul 2008, Submission 95, Attachment 11.

<sup>20</sup> The Constitution, s. 122.

Angus Martyn, 'Commonwealth Radioactive Waste Management Bill 2005 - Bills Digest', Bills Digest No. 59 2005-06.

Australian Treaty Database, Joint Convention on the Safety of Spent Fuel Management and on 22 the Safety of Radioactive Waste Management, http://www.austlii.edu.au/au/other/dfat/treaties/2003/21.html (accessed 31 October 2008).

convention requires the contracting parties to take the appropriate steps to ensure that 'procedures are established and implemented for a proposed radioactive waste management facility', as well as setting out standards and objectives for radioactive waste management facilities.<sup>23</sup>

### 1.22 Martyn also notes that:

The 'implied nationhood' power could also be relevant to support legislation that essentially seeks to allow the Commonwealth to safely store waste generated by its agencies.<sup>24</sup>

- 1.23 The relevance of this power reflects the fact that the bulk of waste has been generated by Commonwealth agencies, particularly the CSIRO and the Australian Nuclear Science and Technology Organisation (ANSTO). However this does not extend to all the waste requiring management.
- 1.24 Some states and territories have passed legislation specifically to try and exclude a waste management site. These include the Northern Territory's *Nuclear Waste Transport, Storage and Disposal (Prohibition) Act 2004*, <sup>25</sup> Queensland's *Nuclear Facilities Prohibition Act 2007*, <sup>26</sup> South Australia's *Nuclear Waste Storage Facility (Prohibition) Act 2000*, <sup>27</sup> Victoria's *Nuclear Activities (Prohibitions) Act 1983*, <sup>28</sup> and Western Australia's *Nuclear Waste Storage (Prohibition) Act 1999*. <sup>29</sup> The New South Wales *Radiation Control Act 1990* prevents the operation of a waste facility without a licence granted by the state's Environment Protection Authority. <sup>30</sup> Tasmania's *Radiation Protection Act 2005* prevents the operation of a waste facility without a licence granted by the state's Director of Public Health. <sup>31</sup> The Australian

Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, Articles 13–17.

24 Angus Martyn, 'Commonwealth Radioactive Waste Management Bill 2005 – Bills Digest', *Bills Digest* No. 59 2005–06, p. 5.

25 Nuclear Waste Transport, Storage and Disposal (Prohibition) Act 2004, <a href="http://www.austlii.edu.au/au/legis/nt/consol\_act/nwtsada2004588/">http://www.austlii.edu.au/au/legis/nt/consol\_act/nwtsada2004588/</a> (accessed 31 October 2008).

26 Nuclear Facilities Prohibition Act 2007, <a href="http://www.austlii.edu.au/au/legis/qld/consol\_act/nfpa2007295/">http://www.austlii.edu.au/au/legis/qld/consol\_act/nfpa2007295/</a> (accessed 31 October 2008).

27 Nuclear Waste Storage Facility (Prohibition) Act 2000, http://www.austlii.edu.au/au/legis/sa/consol\_act/nwsfa2000430/ (accessed 31 October 2008).

Nuclear Activities (Prohibitions) Act 1983, s. 8, <a href="http://www.austlii.edu.au/au/legis/vic/consol\_act/naa1983337/">http://www.austlii.edu.au/au/legis/vic/consol\_act/naa1983337/</a> (accessed 31 October 2008).

29 Nuclear Waste Storage (Prohibition) Act 1999, http://www.austlii.edu.au/au/legis/wa/consol\_act/nwsata1999555/ (accessed 31 October 2008)

30 Radiation Control Act 1990, s. 6, <a href="http://www.austlii.edu.au/au/legis/nsw/consol\_act/rca1990193/">http://www.austlii.edu.au/au/legis/nsw/consol\_act/rca1990193/</a> (accessed 31 October 2008)

31 Radiation Protection Act 2005, s. 20, http://www.austlii.edu.au/au/legis/tas/consol\_act/rpa2005228/ (accessed 31 October 2008).

Capital Territory appears to be the only jurisdiction lacking a legislative framework restricting or prohibiting the operation of such a facility.

1.25 The legislative and court actions in various jurisdictions have limited the Commonwealth's capacity to determine a location for a radioactive waste site. The fact that all the sites considered by the Commonwealth are in the Northern Territory reflects the Territory's limited capacity to oppose Commonwealth actions and legislation under the current Act.

# The bill currently before the committee: Commonwealth Radioactive Waste Management (Repeal and Consequential Amendment) Bill 2008

- 1.26 The bill currently before the committee contains just two items, to repeal the *Commonwealth Radioactive Waste Management Act 2005*; and a consequential repeal of a reference to that Act in the *Administrative Decisions (Judicial Review) Act 1977*.
- 1.27 The bill, if passed, would return the situation at law to that existing prior to the Commonwealth Radioactive Waste Management Act being passed in 2005, and would include:
- Reinstating certain procedural rights and rights of review of decisions that are removed by the 2005 legislation;
- Removing provisions for 'the acquisition or extinguishment of rights and interests related to land on which' a facility may be located;
- Returning the legal situation in the Northern Territory to that of any Commonwealth territory; and
- Reinstating the operation of certain state, territory and federal laws to the extent that they might regulate, hinder or prevent the examination of potential nuclear waste facility sites or the preparation of a selected site.<sup>32</sup>

The policy issues associated with the existing legislation are discussed in chapter two; an alternative policy approach is outlined in chapter three.

<sup>32</sup> Commonwealth Radioactive Waste Management Bill 2005 *Bills Digest*.

# **Chapter 2**

### Radioactive waste: issues with the existing legislation

- 2.1 The evidence received by the committee overwhelmingly favoured repeal of the *Commonwealth Radioactive Waste Management Act 2005*. Even some submitters who supported the creation of a national waste facility did not specifically support existing proposed sites, and believed the current Act should be repealed in favour of more suitable replacement legislation.<sup>1</sup>
- 2.2 Most submissions suggested the existing legislation was unjust<sup>2</sup> and 'contrary to the principles of good governance'.<sup>3</sup> Several submitters also argued that the current legislation supports the wrong policy approach to managing radioactive waste. They suggested that the focus should be on waste minimisation and storage rather than on disposal.<sup>4</sup>
- 2.3 All submitters believed there should be a national approach to managing Australia's radioactive waste. There was no support for the previous government's stance, underpinning the existing legislation, that every jurisdiction should create its own waste management facilities.
- 2.4 As well as these general issues, the committee heard of three main specific concerns regarding the content of the existing Act:
  - The violation by the Commonwealth legislation of Northern Territory autonomy and policy decisions;
  - The procedural unfairness of the current law and the poor consultation processes associated with both the formulation of the legislation and the selection of a site; and
  - Particular concerns about the proposed Muckaty Pastoral Lease site nomination.
- 2.5 This chapter looks at the issues raised during this inquiry regarding the existing waste management approach, before turning to the question of what should be the preferred way forward. Because the bill currently before the committee repeals

<sup>1</sup> Australian Uranium Association, Submission 2; FASTS, Submission 73, p. 1.

<sup>2</sup> See, eg, Judy Blyth, Submission 1.

<sup>3</sup> NT Government, Submission 81, p. 3.

<sup>4</sup> See, eg, Julie Matheson, *Submission* 7; Medical Association for the Prevention of War, *Submission* 38; Public Health Association Australia, *Submission* 100.

existing law, most submitters addressed what they perceived as the shortcomings of the current policy framework and law.

### Problems with the existing legislation and site selection process

- 2.6 The existing legislation is based on the previous government's desire to put beyond doubt the Commonwealth's power to make arrangements for the safe and secure management of the small quantity of radioactive waste produced by Commonwealth agencies from the use of nuclear materials in medicine, research and industry.<sup>5</sup>
- 2.7 The effects of the legislation were summarised at that time:

It explicitly overrides the operation of both Territory and State laws that 'regulate, hinder or prevent' the facility's development and operation, although the Bill retains the flexibility to permit the operation of any Territory or State laws if the Commonwealth considers this appropriate. The Bill also overrides the application of various Commonwealth laws that might present some procedural delays in progressing the facility. The construction and operation of the facility would however still be subject to the usual approval and licensing provisions of the *Australian Radiation Protection and Nuclear Safety Act 1998* and the *Environment Protection and Biodiversity Conservation Act 1999*.

The Bill makes it clear that the Governments decision on the preferred site is not disallowable by Parliament, is not reviewable under the *Administrative Decisions (Judicial Review) Act 1977*, and the Government owes no legal obligation of procedural fairness towards anybody affected by the decision.<sup>6</sup>

- 2.8 The existing facility design concept is for co-locating a store for long-lived intermediate level waste and a disposal facility for low level and short-lived intermediate waste. The goal has been to identify a single site, and to do so in a time frame that would facilitate final storage of long-lived intermediate level reprocessed reactor fuel. This reprocessed fuel is due to be returned to Australia from both France (Cogema) and the UK (Dounreay) by 2015.<sup>7</sup> The current Commonwealth proposal does not provide for accepting waste from the states.
- 2.9 The committee heard extensive criticism of the basis of the current Australian approach. FASTS argued that there should be a national facility that would accept

<sup>5</sup> The Hon. Dr Brendan Nelson, *House of Representatives Debates*, 13 October 2005, p. 1.

<sup>6</sup> Angus Martyn, *Commonwealth Radioactive Waste Management Bill 2005 Bills Digest*, Bills Digest no. 59, 2005–06.

ANSTO, Annual Report 1998–99, p. 42; Senate Education, Science and Training Legislation Committee, Supplementary Budget Estimates 2006–07, Answer to Question on Notice DEST Question No. E548\_07; Dr Cameron, Dr Ron Cameron, Acting Chief Executive Officer, ANSTO, Senate Standing Committee on Economics, Estimates Hansard, 3 June 2008, p. 100.

waste from all states and territories, not just from Commonwealth bodies. They suggested:

It is internationally recognised that dispersed storage of radioactive waste is not a viable long-term strategy and is potentially hazardous, inefficient and impossible to completely secure.<sup>8</sup>

- 2.10 Others were critical of the centralised facility, not because it would accept only Commonwealth waste, but because neither centralisation nor disposal were necessarily to be preferred. They argued that alternative approaches should be explored through public inquiry, and placed an emphasis on storage of waste and waste minimisation.<sup>9</sup>
- 2.11 Some groups argued that choosing a remote location for a facility increased the transportation risks without any clear public health benefit.<sup>10</sup> The Public Health Association argued that this approach taken to site selection was creating public health risks, particularly amongst central Australian Aboriginal people.<sup>11</sup>
- 2.12 Many stakeholders favoured an approach that involved waste minimisation and planned on-site storage.<sup>12</sup> They placed a strong emphasis on community engagement, contrasting this with what they argued was the removal of stakeholders from the process under the existing Act.
- 2.13 It was also pointed out that the current process is not relying on the scientific site assessment process that the Commonwealth had developed and used prior to 2004:

The current identified potential dump sites in the NT were not chosen on the basis of any objective, scientific criteria. None of the sites under consideration were short-listed by the earlier Federal Bureau of Resource Sciences' National Repository Project in the 1990s which assessed alternative sites around Australia for a repository for low-level and short-lived intermediate-level waste. <sup>13</sup>

\_

<sup>8</sup> FASTS, Submission 73, p. 2.

<sup>9</sup> Friends of the Earth Australia, *Submission* 74; Australian Conservation Foundation, *Submission* 85; Public Health Association Australia, *Submission* 100.

See, eg, Public Health Association Australia, *Submission* 100.

Public Health Association Australia, Submission 100.

See, eg, Friends of the Earth, *Submission* 74; No Waste Alliance, *Submission* 83; Anti-Nuclear Alliance of Western Australia, *Submission* 90; Public Health Association Australia, *Submission* 100.

<sup>13</sup> Australian Conservation Foundation, *Submission* 85, p. 2.

- 2.14 The committee acknowledges this point. The initial process, commenced in 1992, assessed eight regions around Australia, and found that all eight regions contained potentially suitable sites, with some having more potentially suitable areas than others. None of the four sites currently under consideration falls within any of the regions originally examined.
- 2.15 The role of political factors, rather than scientific and technical ones, was effectively confirmed by ANSTO, whose officers remarked:

Mr McIntosh—... the requirements for ... low level waste, they are not that difficult. There is a range of suitable geologies. In France they are put in clay, I believe. In Germany they are in salt. In other places they are in hard rock...

But there is a range of geologies which have to be suitable, and as long as you can find one of those geologies, that is all right. There is a rainfall issue. A repository in the United Kingdom or France certainly has rainfall challenges which would not exist in most of Australia. But you can deal with that with a bit of engineering, and that is been done successfully in those countries.

CHAIR—So then why does Australia mainly look at remote sites?

Mr McIntosh—I believe it is for political reasons, Senator. 16

2.16 Mr McIntosh subsequently drew attention to the role of the NHMRC's *Code of Practice for the Near-Surface Disposal of Radioactive Waste in Australia* (a code now administered by the Australian Radiation Protection and Nuclear Safety Agency, ARPANSA). The code sets out a number of site selection criteria for a waste facility, including that it should be in an area of low population density.<sup>17</sup> The Code's principal criteria are:

a. the facility site should be located in an area of low rainfall, should be free from flooding and have good surface drainage features, and generally be stable with respect to its geomorphology;

b. the water table in the area should be at a sufficient depth below the planned disposal structures to ensure that groundwater is Code of practice for the near-surface disposal of radioactive waste in Australia (1992)

Bureau of Resource Sciences, *A Radioactive Waste Repository for Australia: Site Selection Study Phase 2 – Discussion Paper*, Bureau of Resource Sciences, Canberra, 1994, <a href="http://www.ret.gov.au/resources/Documents/radioactive\_waste/public\_discussion\_paper\_phase\_2.pdf">http://www.ret.gov.au/resources/Documents/radioactive\_waste/public\_discussion\_paper\_phase\_2.pdf</a>.

Bureau of Resource Sciences, *A radioactive waste repository for Australia: Site selection study Phase 3: Regional assessment: A public discussion paper*. Bureau of Resource Sciences, Canberra, 1997, <a href="http://www.ret.gov.au/resources/Documents/radioactive\_waste/public\_discussion\_paper\_phase3.pdf">http://www.ret.gov.au/resources/Documents/radioactive\_waste/public\_discussion\_paper\_phase3.pdf</a>.

<sup>16</sup> Mr Steven McIntosh, ANSTO, *Proof Committee Hansard*, 28 November 2008, p. 10.

<sup>17</sup> Mr Steven McIntosh, ANSTO, correspondence to the committee, 9 December 2008.

unlikely to rise to within five metres of the waste, and the hydrogeological setting should be such that large fluctuations in the water table are unlikely;

- c. the geological structure and hydrogeological conditions should permit modelling of groundwater gradients and movement, and enable prediction of radionuclide migration times and patterns;
- d. the disposal site should be located away from any known or anticipated seismic, tectonic or volcanic activity which could compromise the stability of the disposal structures and the integrity of the waste;
- e. the site should be in an area of low population density and in which the projected population growth or the prospects for future development are also very low;
- f. the groundwater in the region of the site which may be affected by the presence of a facility should ideally not be suitable for human consumption, pastoral or agricultural use; and
- g. the site should have suitable geochemical and geotechnical properties to inhibit migration of radionuclides and to facilitate repository operations. <sup>18</sup>
- 2.17 The code also states that 'Site selection shall include a suitable consultative process to establish public consent to the location of a disposal facility at the particular site' 19
- 2.18 Mr McIntosh noted that the *Code of Practice* has been central to the site selection process since 1992.<sup>20</sup> This is reflected in the regulatory regime administered by ARPANSA. Its 2006 guidance [title] states in part:

The ARPANS Regulations also require that disposal activities are in accordance with the National Health and Medical Research Council *Code of Practice for the Near Surface Disposal of Radioactive Waste.*<sup>21</sup>

2.19 The Australian Radiation Protection and Nuclear Safety Regulations 1999 state:

The holder of a source licence or a facility licence must also ensure that dealings with the disposal of controlled material and controlled apparatus are in accordance with the following Codes of Practice

21 ARPANSA, Regulatory Guidance for Radioactive Waste Management Facilities: Near Surface Disposal Facilities; and Storage Facilities, ARPANSA, December 2006, pp 14–15, <a href="http://www.arpansa.gov.au/pubs/waste/rwmfacilities\_reg\_guid.pdf">http://www.arpansa.gov.au/pubs/waste/rwmfacilities\_reg\_guid.pdf</a> (accessed 10 December 2008).

NHMRC's Code of Practice for the Near-Surface Disposal of Radioactive Waste in Australia, Radiation Health Series No. 35, 1992, ARPANSA, pp 12–13, <a href="http://www.arpansa.gov.au/pubs/rhs/rhs35.pdf">http://www.arpansa.gov.au/pubs/rhs/rhs35.pdf</a> (accessed 10 December 2008).

NHMRC's Code of Practice for the Near-Surface Disposal of Radioactive Waste in Australia, Radiation Health Series No. 35, 1992, ARPANSA, p. 14, <a href="http://www.arpansa.gov.au/pubs/rhs/rhs35.pdf">http://www.arpansa.gov.au/pubs/rhs/rhs35.pdf</a> (accessed 10 December 2008).

<sup>20</sup> Mr McIntosh, ANSTO, correspondence to the committee, 9 December 2008.

. . .

the Code of Practice for the Near - Surface Disposal of Radioactive Waste in Australia<sup>22</sup>

2.20 The committee notes that this appears to indicate that a process that did not 'include a suitable consultative process to establish public consent to the location of a disposal facility at the particular site' would be inconsistent with the Code and therefore with the ARPANS Regulations.

### Pressure on affected communities

2.21 The committee was made aware of the stresses already experienced by Indigenous communities affected by processes underway, or contemplated under, the current Act. The Central Land Council was asked about their role in proposing sites for a waste facility. They responded:

... we are not about to undertake that work. We have enough things coming at us now... We have the intervention, shires and whatever else and we are now about to get hit by people wanting to talk about departing from outstations. We have enough to do on a day-to-day basis.<sup>23</sup>

2.22 The Public Health Association of Australia raised concerns about the health effects of the stresses arising from the existing arrangements.

The process that has ensued from the enactment of the Commonwealth Radioactive Waste Management Act 2005 and subsequent amendments has resulted in disempowerment of, and distress for, local Aboriginal people. Central Australian Aboriginal people suffer the highest rates of chronic disease in the world. The effects of chronic stress / distress caused by such events in turn negatively impact on increased rates of chronic disease. Therefore actions such as imposing the Commonwealth Radioactive Waste Management Act 2005 and amendments undermines government Aboriginal health policy, such as the commitment to closing the gap in Aboriginal health indices and addressing health disparities.<sup>24</sup>

2.23 As well as these broader concerns with existing Commonwealth radioactive waste policy, submitters were critical of several specific features of the current legislation.

### The Commonwealth overrules the Northern Territory

2.24 The committee heard numerous objections to the existing legislation based on the fact that it singled out the Northern Territory for special treatment, setting up site

Australian Radiation Protection and Nuclear Safety Regulations 1999, Reg. 48(3).

<sup>23</sup> Mr David Ross, Director, Central Land Council, *Proof Committee Hansard*, 17 November 2008, p. 11.

Health Association of Australia, Submission 100.

nomination processes that could only be applied in the Territory and not in other jurisdictions.

- 2.25 The existing law contains a number of provisions that specifically target the Northern Territory. These include:
  - Nominations of sites can only come from the Northern Territory (s. 3A)
  - The Commonwealth is empowered to take steps to assess the suitability of sites, including over-riding existing rights or laws, only within the Northern Territory (s. 4(2))
  - The extinction of various rights and interests association with the selected site, which will only be within the Northern territory; and
  - The schedule of proposed sites is confined to lands within the Northern Territory (Schedule 1).
- 2.26 The committee notes that not even other Commonwealth territories were placed on an even footing with the Northern Territory, let alone states. The committee was not made aware of any sound justification for the targeting of the Northern Territory to the exclusion of all other jurisdictions.
- 2.27 The Northern Territory government strongly objected to the existing legislation, saying:

The Northern Territory Government contends that the provisions in the *Commonwealth Radioactive Waste management Act 2005* (the CRWM Act) that override existing laws made by the democratically elected Legislative Assembly of the Northern Territory prohibiting the transport and storage of radioactive waste (refer *Nuclear Waste Transport*, *Storage and Disposal (Prohibition) Act 2004*):

- Are a serious erosion of the democratic rights of Territorians, and are contrary to the concept of self government;
- Create legal uncertainty in regard to the application of Northern Territory laws; and
- Are contrary to the principles of good governance.<sup>25</sup>
- 2.28 Numerous other submitters drew attention to the over-riding of Northern Territory laws, objecting both to the discrimination involved, as well as the fact that one of those laws in particular the *Nuclear Waste Transport, Storage and Disposal (Prohibition) Act 2004* is intended to prevent precisely the activities envisaged under the Commonwealth's legislation.<sup>26</sup>

NT Government, Submission 81, p. 3.

See, eg, Arid Lands Environment Centre, *Submission* 35; Environment Centre NT, *Submission* 36.

- 2.29 The committee believes that the targeting of one jurisdiction is inequitable. In targeting the Northern Territory the current Act is directed toward ensuring that the waste is located in the jurisdiction that has the least legal power to act in response to any concerns it has with the process. The committee understands that it is also the jurisdiction that makes the least use of one of radiation's key benefits: nuclear medicine. The committee was told that the Northern Territory has the fewest nuclear medicine procedures of any Australian jurisdiction, not only in absolute terms but on a per capita basis.<sup>27</sup> It also guarantees that radioactive waste will have to be transported large distances, particularly from New South Wales and South Australia, regardless of the relative merits of safety cases that might be made for sites in different jurisdictions.
- 2.30 One of the most disturbing features of the current legislation is that it severely curtails the role of sound science in the process of choosing a site. It abandons the Commonwealth's commitment to basing the process on the best science, in favour of basing it on choosing a location with the least legal capacity to dispute the outcome.

### The existing law is procedurally unfair

- 2.31 The existing legislation shows complete disregard for effective policy processes and effective consultation. Amongst the most egregious examples, the current legislation:
  - With regard to voluntary nominations (the Act, ss. 3A to 3D), allows the minister 'absolute discretion' to decide whether to approve nominated land as a site, but also says the minister can ignore a nomination if he or she wishes;<sup>28</sup>
  - States that no person is entitled to procedural fairness in respect of declarations that a site is to be selected for a facility, or any extinguishment of rights associated with that declaration;<sup>29</sup>
  - Suspends rights of review under the *Administrative Decision (Judicial Review) Act 1977*;<sup>30</sup>
  - Prevents interested parties from exercising rights they would normally have had under the *Lands Acquisition Act 1989* and the *Native Title Act 1993*.<sup>31</sup>

The Act, ss. 3D and 8.

<sup>27</sup> Friends of the Earth Australia, Submission 74.

<sup>28</sup> The Act, 3C(2).

<sup>30</sup> The Commonwealth Radioactive Waste Management Legislation Amendment Act 2006, Schedule 1, item 1.

<sup>31</sup> The Act, s. 10(2).

2.32 Most submitters commented on these provisions, particularly those that stripped rights from Indigenous traditional owners. The ACF was typical of critics of the legislation in this regard:

The Commonwealth Radioactive Waste Management Act 2005 (CRWMA) undermines environmental, public safety and Aboriginal heritage protections. It prevents the Aboriginal and Torres Strait Islander Heritage Protection Act 1984 from having effect during site investigation and excludes the operation of the Native Title Act 1993.

The CRWMA is in stark contrast to the accepted international (International Atomic Energy Agency, UK Commission on Radioactive Waste Management et al) acknowledgment of the profound importance of community consultation, consent and confidence in successful decision making regarding radioactive waste management.

In November 2006 the Federal Government moved to further remove Indigenous community rights with a series of amendments to the CRWMA that removed the need for community consultation, informed traditional owner consent, procedural fairness and administrative review from any potential dump site that might be nominated by a NT Land Council, particularly the Northern Land Council. These amendments directly undermined the far more robust and inclusive consultation and consent provisions of the long standing Aboriginal Land Rights Act. 32

- 2.33 The committee agrees that the undermining of legal rights by the current legislation is unfair and discriminatory, and should not form the foundation for any issue, including radioactive waste management.
- 2.34 Some submitters also suggested that the Act does not require a Land Council to conduct consultations prior to making a nomination under section 3A of the Act. They argued this because section 3A(2A) states that the validity of a nomination is not affected by whether all procedures under section 3A (including consultation processes) have been followed.<sup>33</sup>
- 2.35 The committee understands that, while the removal of procedural rights created by section 3A(2A) is to be deplored, it does not exempt Land Councils from a legal requirement to consult.<sup>34</sup> Nevertheless, by preventing any problems with that consultation from affecting the validity of the nomination, the Act reduces the confidence of affected parties in the process, as well as taking away rights to use legal means to ensure proper process is adhered to.

<sup>32</sup> ACF, Submission 85, p. 2.

See, eg, Arid Lands Environment Centre - Beyond Nuclear Initiative, *Submission* 94, p. 5; Muckaty Traditional owners opposed to the proposed radioactive waste facility, *Submission* 95, p. 4.

<sup>34</sup> Mr Ron Levy, NLC, *Proof Committee Hansard*, 17 November 2008, p. 13.

### The Muckaty Pastoral Lease site nomination

2.36 In May 2007, the Northern Land Council (NLC) facilitated a nomination of a site under sections 3A and 3B of the Act. That nomination was supported by some Ngapa traditional owners of land that is managed through the Muckaty Land Trust. At the time, traditional owner Amy Lauder explained why she put forward the nomination:

First, we want to create a future for our children with education, jobs and funds for our outstation at Muckaty Station and transport.

Secondly, we have been to Lucas Heights and accept that the waste facility will be safe for the environment.

Thirdly, our decision will help all people in Australia – because all Australians benefit from nuclear medicine which saves lives.<sup>35</sup>

- 2.37 The nomination was approved by a meeting of the Northern Land Council in May 2007, and was accepted by the Minister for Education, Science and Training in September 2007.<sup>36</sup> The nomination was supported by a confidential anthropological report, prepared by three anthropological consultants to the NLC. This report was important to the debate amongst submitters and is discussed below.
- 2.38 In June 2007 a site nomination deed was signed between the Commonwealth, the NLC and the Muckaty Land Trust,<sup>37</sup> agreeing to a process for the site nomination and a schedule of payments, totalling \$11 million in a charitable trust plus \$1 million in education scholarships.<sup>38</sup> The first payments have been made under this contract. The site remains under consideration by the government, which is currently engaged in a process of assessing the nominated site, along with three others listed in the schedule to the Act.

### Muckaty Land Trust traditional owners have differing views

2.39 The NLC was concerned to ensure, should the existing legislation be repealed, that the nomination of the Muckaty site would stand:

The NLC would only support repeal of the Act if it is replaced by appropriate laws which both preserve the Ngapa clan's rights regarding its existing nomination under the Act, and which enable traditional owners of other land to facilitate development of their country for a radioactive waste

The Hon Julie Bishop MP, 'Approval of radioactive waste facility nomination', *Media Release*, 27 September 2007.

<sup>35</sup> Cited in NLC, Submission 96, p. 4.

<sup>37</sup> Mr Patrick Davoren, DRET, *Proof Committee Hansard*, 28 November 2008, p. 38.

<sup>38</sup> NLC, *Submission* 96, p. 4; Mr Patrick Davoren, DRET, *Proof Committee Hansard*, 28 November 2008, p. 44.

facility if they wish - provided that the environment and sacred sites are protected.<sup>39</sup>

2.40 The committee received evidence from many groups, including some of the traditional owners of land at Muckaty, critical of the nomination and of the process that led to it. Ms Stokes, one of the traditional owners at Muckaty, said:

I would like to talk about the waste dump and my people, the traditional elders I have brought from Tennant Creek. We have come because we have said no to the waste dump. We are the main Warlmanpa tribe. I have brought some Ngapa people also who are against the waste dump. I talk to my people about the waste dump all the time, and every time I do they say that it is not good to have a waste dump on our land. We are finding it hard. We want some people to listen to us. Some of the traditional owners, the elders of the Warlmanpa tribe, which is the main tribe in that country, are sick and very worried because they just want to say no to the waste dump. <sup>40</sup>

- 2.41 The criticisms of the Muckaty site nomination put to the committee were based on two related points. The first was that the nomination was not legitimate because most Indigenous traditional owners of the Muckaty Pastoral Lease were opposed to having a radioactive waste facility in the region. The second, related, criticism disputed the adequacy of consultation processes surrounding the nomination. There were, for example, claims that people had not been notified of, or were not able to participate in, discussions leading up to a nomination; and that documents were unavailable for examination.
- 2.42 The committee tested these issues in questions to the Northern Land Council and other parties during hearings, as well as receiving supplementary submissions on this subject.

### The nomination: who speaks for the country?

- 2.43 The nomination of the Muckaty site was made by the Northern Land Council on behalf of one group of traditional owners of the Muckaty lands, the Ngapa clan. Some evidence to the committee implied that this nomination process was open to question, suggesting that there are doubts about whether the waste facility proposal has support from all the relevant traditional owners.
- 2.44 This issue goes to the question of who speaks for the country on which it is proposed to site the facility. This is a matter of Indigenous rights and traditional law. The Committee is not competent to deal with the anthropology that goes to the question of who has decision-making responsibility for particular areas of country within the area held by the Muckaty Land Trust. The committee does however make the following observations.

\_

<sup>39</sup> NLC, Submission 96, p. 2.

<sup>40</sup> Ms Dianne Stokes, Muckaty traditional owner, *Proof Committee Hansard*, 17 November 2008, p. 1.

- 2.45 The recognition of Indigenous land rights over the Muckaty Pastoral Lease was founded on the 1997 report of the Aboriginal Land Commissioner, a copy of which was provided to the committee. This report identified Aboriginal clans with responsibility for the lands covered by the Lease, and delineates some of the traditional law and dreamings that links those clans to sites in the region.
- 2.46 The committee was provided with a map showing the location of the proposed waste facility in relation to sites mentioned in the Land Commissioner's Report. As the traditional owners opposed to the facility pointed out, some of these sites close to the proposed facility are not Ngapa sites:

Murunju-Mantangi (66) is recognised as a Yapayapa site;

Karakara (51) is recognised as a Yapayapa site;

Lungkarta (50) is recognised as a Ngarrka site;

Karntawarralki (74) is recognised as a Milwayi site; and

The unnamed site (109) is recognised as a Ngarrka site.<sup>41</sup>

2.47 The traditional owners opposed to the facility suggested the Land Commissioner's 1997 report implies doubt over whether the facility is located on Ngapa land. The Muckaty Land Trust traditional owners who are opposed to the waste facility argued:

The anthropological report referred to provides an inconsistent view to that as set out and found after extensive hearings of the 1997 Land Commissioners Report... No evidence has been provided to the committee concerning this purported anthropological study to date. No anthropologists have made submissions on behalf of the Northern Land Council at any of the hearings and to date no such report has been viewed by the Committee. In the event that such evidence is provided however, it ought have little to no weight as it has not been tested nor has any party had an opportunity to respond to the matters raised therein. In any event, the comprehensive findings concerning sacred sites at Muckaty within the 1997 Land Commissioners Report following extensive hearings must be considered as the best evidence and authority on this issue. The 1997 Land Commissioners report must prevail.

2.48 This argument relies on the suggestion that, because some sacred sites in the vicinity of the proposed waste facility are associated with other clan groups, this calls into question the identification of the traditional owners of the land. However, the committee notes that the Land Commissioner's report set out the distinctive nature of Ngapa responsibilities in the area, including the overlapping nature of sites and

Muckaty Traditional owners opposed to the proposed radioactive waste facility, *Submission* 95A.

Muckaty Traditional owners opposed to the proposed radioactive waste facility, *Submission* 95A.

responsibilities for country. The Land Commissioner's report described the system of affiliations and responsibility in general terms:

The areas on which the separate groups focus are not necessarily completely separate. As is the case with Aboriginal land tenure systems in semi-arid areas, there tends to be a focus on sites of significance, which are often sites associated with the practicalities of survival in a dry environment. Sharply defined boundaries between the estates of different groups are unusual in such circumstances. There is a tendency for different groups to share some sites, with a consequential overlap between the areas claimed by those groups. There is also a tendency for land between sites to be the subject of overlapping claims, or for it to be unclear into the estate of which group it falls...

The major dreamings involved in the present claim are travelling dreamings, some of which travel over quite long distances. Different parts of the tracks followed by dreamings belong to different people. A group will have responsibility for a defined part of dreaming track. The sites along that part of the track and the country surrounding them will belong to that group...<sup>43</sup>

### 2.49 The Commissioner than turned to the nature of the Ngapa claim:

The principal dreaming of the Ngapa group is the Ngapa, or rain, dreaming. In this case, the dreaming travels from its originating site at Kuntalymiri, well off the claim area to the south, to Purnarrapan (site 48), at Renner Springs [well north of the Muckaty station and proposed waste facility area]. In doing so it crosses the claimed land in a broad swath. It extends as far west as Minji (site 28), just south of the southern border of the claim area, Julypungali (site 19), which it shares with other dreamings, notably Japurla-japurla... and Puyarrinyku (site 43). Its eastern sites within the claim area are intermingled and sometimes shared with Milwayi. Its southernmost site on the claim area, Murlurrparta (site 46), is shared with Ngarrka and Japurla-japurla.

2.50 The committee cannot comment on the specific anthropological evidence in relation to country within the bounds of the proposed facility: none of the specific sites discussed by the Land Commissioner in 1997 lie within the proposed facility's boundaries. However, the Commissioner's description of the relationship of clans to country in this region generally, and of the Ngapa's relationship to their country in particular, indicates that the Ngapa have wide ranging responsibilities for country across the Muckaty Pastoral Lease, including in the area where the facility is proposed to be located. It does not seem reasonable to use the Land Commissioner's report to suggest that Ngapa clan members might *not* be responsible for the area under present discussion.

<sup>43</sup> Land Commissioner's Report 1997, p. 38.

<sup>44</sup> Land Commissioner's Report 1997, p. 40.

2.51 The committee now turns to other evidence received during the inquiry. Committee members put this issue of who speaks for the country to the NLC's representatives. Mr Levy from the NLC responded:

Senator LUDLAM—Mr Levy, I would just put to you that the support is greatly less than overwhelming in terms of the evidence that has already been put to us just so far this morning.

Mr Levy—I observed the evidence and that evidence does not change my view at all. The question is always a case of anthropological advice. We had advice from three very experienced anthropologists: the NLC's then anthropology branch manager, Kim Barber, the NLC's current anthropology branch manager, Robert Graham, and Dr Brendan Corrigan. Their advice was in relation to the relevant land and the identity of the traditional Aboriginal owners, and more importantly as to the identity of how that group, within the context of a larger group of groups, makes a decision about that country. Further, the advice was in relation to the decision in relation to that country under Aboriginal tradition when there are individuals in other groups, some of whom are consenting and some of whom are not, and whether the position of individuals in other groups affects the decision of the group with ultimate authority regarding that land under Aboriginal tradition. The NLC's anthropological advice was and remains that there was overwhelming support from the group with ultimate authority under Aboriginal tradition to make decisions regarding that land.

CHAIR—Mr Levy, can you just clarify if that is still the view of the Northern Land Council, that there is still majority support for your proposed site?

Mr Levy—Not majority; overwhelming. 45

2.52 Committee members sought more detail on the role of the full council of the NLC:

Senator BIRMINGHAM—... the full council has to respect the rights of those traditional owners who have particular authority over a particular piece of land; is that correct?

Mr Levy—That is right, and that is always the way full council approaches things.

Senator BIRMINGHAM—The anthropological advice to which you referred in response to questioning from Senator Ludlam, was that provided verbally or in writing?

Mr Levy—No, it was provided in the form of a comprehensive anthropological report required by the legislation which, under that legislation, has to be submitted to the minister in relation to the then minister's decision as to whether or not to accept the nomination.

Senator BIRMINGHAM—Is that a public document?

<sup>45</sup> Proof Committee Hansard, 17 November 2008, p. 14.

Mr Levy—No, it is a private document.<sup>46</sup>

2.53 The committee also acknowledges the supplementary submission provided by the NLC, in response to the committee's request for more detailed information, which stated:

The NLC's anthropological advice was (and remains) that members of the Ngapa branch or group associated with the Lauder families are the traditional Aboriginal owners of the nominated site. The group is comprised by approximately 40 persons. Members of other Ngapa groups are the traditional Aboriginal owners for other land. This advice was consistent with previous consultations regarding other developments such as the Amadeus to Darwin gas pipeline in 1996, the Alice Springs to Darwin railway in 1998, and the haulage road on Muckaty Station for the Bootu Creek manganese mine in 2004 - all of which traverse the length or breadth of the station and cross the country of different traditional owning groups from whom separate consent (relating only to their respective country) was required under the Land Rights Act. This advice was also iterated during consultations with senior (and other) representatives of other Ngapa groups (and of other neighbouring groups), who confirmed that they did not have primary spiritual responsibility for the nominated site.<sup>47</sup>

- 2.54 The NLC and the Department both indicated that they were aware of the range of views of traditional owners of Muckaty. They argued, however, that the traditional owners for the specific site involved supported the facility. They also stated that, having listened to the evidence given to the committee, they were of the view that no one was contesting the right of certain Ngapa people to speak for the land on which it is proposed to place the waste facility.<sup>48</sup>
- 2.55 The committee noted the evidence of some traditional owners opposed to the radioactive waste facility. While in general, this evidence was about consultation processes, at least one traditional owner did at one point appear to question whether all relevant decision-makers had played their appropriate roles. Ms Bennett at one point said:

The way we found out about the consultation process was wrong. If everything was open, honest and above board, why did the NLC not come down and consult with the traditional owners on their country openly and honestly? They should not have gone on to any further stage until everyone had a clear understanding of what was going on. It appears to me that two individuals, or possibly three, took it upon themselves to speak for the rest of the tribe and clans. They had no right to do that, and I will say that straight out. When the land claim was on, all the extended families that have links and connections to Muckaty were together as one. My

48 See Mr Ron Levy, NLC, Proof Committee Hansard, 17 November 2008, p. 14; Mr Patrick Davoren, DRET, *Proof Committee Hansard*, 28 November 2008, pp 40–41.

*Proof Committee Hansard*, 17 November 2008, pp 14–15. 46

<sup>47</sup> NLC, Submission 96A, p. 6.

grandmother walked that country the same as the rest, yet those two individuals, my cousins, chose not to involve the senior traditional owners in any discussions, and that is just down and out wrong.<sup>49</sup>

2.56 This statement by Ms Bennett appears to suggest the decision-making was also problematic. It certainly was suggesting that the consultation processes were deficient.

### The Muckaty nomination: consultation processes

2.57 As the Land Commissioner's report showed, it is clear that clans other than the Ngapa do have responsibilities for sites and dreaming tracks close to the proposed facility site. Some members of these clans, opposed to the facility, argued they had a right to be consulted, and that the consultations that did occur were not adequate:

Ms Bennett—I am also very disappointed in the NLC consultation process. The NLC is the Aboriginal people's voice, and they failed to represent them... I think the consultation process was very flawed and that the time for trying to pull the wool over people's eyes is past. Open and honest discussion should be happening involving all the right people, not just with certain elements of the people. 50

2.58 The NLC insisted such consultations had taken place:

The land council followed its usual procedures in relation to consultations. In particular when dealing with a major matter, whether it be a matter like this, a major mine or anything which has either an actual or potential physical effect regarding other people or where people are just interested in it because it is controversial, the land council always comprehensively consults. In relation to this matter, the land council did just that. Many of the people here today are people who the land council consulted with and/or was always aware of what their position was at various times. There is a range of other people who are not here that the land council consulted with. In that respect I am talking about people other than the traditional Aboriginal owners of the land. We obviously also consulted with them.

The Land Rights Act and the radioactive waste act require comprehensive consultations... We consulted in relation to other land which was not Ngapa land and we were not satisfied in relation to that land that the relevant traditional owners were consenting or were likely to consent. In relation to those sorts of matters, we obviously did not pursue them. But, in relation to this particular land, we were satisfied there was overwhelming support for a nomination after doing the comprehensive consultations.<sup>51</sup>

Ms Marlene Bennett, Muckaty traditional owner, *Proof Committee Hansard*, 17 November 2008, p. 3.

<sup>49</sup> Ms Marlene Bennett, Muckaty traditional owner, *Proof Committee Hansard*, 17 November 2008, p. 2.

Mr Ron Levy, Northern Land Council, *Proof Committee Hansard*, 17 November 2008, p. 14.

2.59 Following the hearings held by the committee, the NLC responded on this issue in more detail. The NLC outlined the history of the Muckaty nomination, the meetings it held with various groups of traditional owners, and visits involving the Commonwealth, both of traditional owners to the Lucas Heights reactor facility, and of Commonwealth officers to the Muckaty Pastoral Lease.<sup>52</sup>

#### The committee's view

- 2.60 The committee is aware from its evidence, both in written submissions and at hearings, that there is division amongst the Indigenous owners of the Muckaty Land Trust. In these circumstances the absence of rights to procedural fairness is of particular concern. The committee believes it is vital that consultations and decision-making processes reflect the interests that all clan groups have in the immediate area.
- 2.61 The committee understands the need to maintain the confidential status of anthropological information in certain circumstances. It appreciated the cooperation of the NLC and the Department in ensuring that information was provided to the committee in relation to that report, while protecting sensitive information not needed by the committee. It notes claims made by some affected parties that they should have had the opportunity to test claims made in the anthropological report, but that such an opportunity had not been made available to them.
- 2.62 The committee believes that the controversy surrounding the current Muckaty nomination, including the process of gathering and providing anthropological information, underlines the fundamentally flawed nature of the existing legislation. The subsequent lack of appeal rights available to those aggrieved by the nomination also demonstrates why the legislation is deficient.
- 2.63 The fact that the Muckaty nomination remains current is in itself a cause of community concern which overlays discussion about the future appropriate management of Australia's radioactive waste.
- 2.64 The committee also recognises there are contractual arrangements existing between the Commonwealth, the Northern Land Council and the Muckaty Land Trust that have been respected.

#### **Recommendation 1**

- 2.65 Noting there is a current nomination put forward by some Ngapa traditional owners seeking to have a facility sited on their country, the committee recommends that with regard to this nomination the process from this point forward should comply with the *Code of Practice for the Near-Surface Disposal of Radioactive Waste in Australia*. The process should:
  - Not rely on the suspension by the current Act of any of the procedural rights of other interested parties; and

<sup>52</sup> NLC, Submission 96A, pp 67.

• Not proceed any further until those pieces of Commonwealth legislation suspended from operation by the Commonwealth Radioactive Waste Management Act again apply.

### Waste minimisation and the Lucas Heights reactor

- 2.66 In the course of this inquiry, some witnesses argued that Australia does not need a research reactor in order to supply medical isotopes. This was generally made as part of a case for waste minimisation. Waste minimisation is a strategy which the committee generally supports.
- 2.67 The Medical Association for the Prevention of War (MAPW) released a study in 2004, arguing against continuing to operate a research reactor in Australia for the purposes of nuclear medicine.<sup>53</sup> MAPW argued that Australia should import medical radioisotopes, support innovation in medical technologies such as expansion of positron emission tomography, and support research into non-reactor production of the most important radioisotope in this field, Technetium 99m.
- 2.68 Without wishing to get into the detail of this debate, the committee does note that there are some issues with the approach of ceasing to operate a research reactor as a source of medical radioisotopes. First, while there may be many nuclear reactors around the world, the IAEA has pointed out that there are very few that produce the material used in most nuclear medicine, technetium 99m:

Just five research reactors produce most of worldwide demand for molybdenum 99, from which technetium 99m is fabricated. These are the High Flux Reactor in Petten, the Netherlands; BR2 at Mol in Belgium; Osiris at Saclay, France; NRU at Chalk River, Canada; and the Safari-1 at Pelindaba, South Africa. These facilities range in age from 42 to 51 years. A sixth reactor, Australia's recently constructed OPAL at Lucas Heights, is expected to commence molybdenum 99 production soon. Two research reactors in Canada – each dedicated to isotope production and expected to produce enough molybdenum to account for the bulk of global supply – were recently cancelled due to technical challenges.<sup>54</sup>

2.69 This was underlined during hearings, with ANSTO representatives commenting about how Australia managed for isotopes during a reactor shutdown:

Mr McIntosh—We were able to rely upon a good relationship with the South Africans, but the South African Safari reactor is around 45 years old. Clearly being able to rely on the South Africans for much longer is not a tenable state of affairs. We have been lucky.<sup>55</sup>

<sup>53</sup> MAPW, *A New Clear Direction: Securing Nuclear Medicine for the Next Generation*, 2004, tabled by ACF, Canberra public hearing, 28 November 2008.

IAEA, Addressing the Global Shortage of Beneficial Radiation Sources, 4 November 2008, <a href="http://www.iaea.org/NewsCenter/News/2008/resreactors.html">http://www.iaea.org/NewsCenter/News/2008/resreactors.html</a> (accessed 25 November 2008).

<sup>55</sup> Mr Steven McIntosh, ANSTO, *Proof Committee Hansard*, 28 November 2008, p. 17.

2.70 MAPW conceded that importation of radioisotopes would be necessary were Australia not to operate a research reactor. However, as Mr Gerry Wood MLA argued, stopping Australian isotope production does not solve the nuclear waste problem, it just moves it to another country. If we import our radioisotopes, we are leaving another country with the nuclear waste associated with Australia's nuclear medicine. International cooperation to minimise the number of operating research reactors may be sensible; as a policy principle for deciding whether Australia should be one of the countries that hosts such a reactor, this is not a helpful argument.

MAPW, A New Clear Direction: Securing Nuclear Medicine for the Next Generation, 2004, p.

<sup>57</sup> Mr Gerry Wood MLA, *Proof Committee Hansard*, 18 November 2008, p. 17.

# **Chapter 3**

### Radioactive waste: a new policy framework

- 3.1 The committee has no doubts that the existing legislation is deeply flawed. It is not a suitable foundation on which to build Australian nuclear waste policy. It reflects a failure of negotiation and cooperation amongst governments.
- 3.2 Repeal of the current legislation will not, in itself, resolve the question of how Australia should manage its radioactive waste. This chapter looks at the question of what should be the preferred way forward. It looks at options for ensuring radioactive waste management is placed back on a sound scientific and technical footing. The committee also recognises the considerable experience that exists internationally in managing radioactive waste, and heard evidence that international practice on waste management is evolving.

### Innovation in waste management and international practice

- 3.3 The committee heard a range of views about what is 'best practice' in dealing with radioactive wastes. Some submitters suggested that long-term storage and monitoring was 'world's best practice', and drew attention to the dangers of transport, and the limitations of disposal proposals. Some governments favour long-term storage over disposal, at least for higher-level wastes.
- 3.4 Other submitters suggested that there is extensive 'national and international experience' demonstrating 'that radioactive waste can be safely managed and stored'.<sup>3</sup> ANSTO argued that centralised facilities were 'international best practice', though they did not suggest that this favoured disposal over storage.<sup>4</sup> Some governments favour geological disposal, again usually in relation to higher-level wastes.<sup>5</sup>
- 3.5 A NSW parliamentary inquiry recommended a mixed approach. In 2004, it indicated that the original site selection process be abandoned, and that the Commonwealth should:

Blue Mountains Nuclear Free Group, *Submission* 43; Public Health Association of Australia, *Submission* 100.

CoRWM, Key Issues, <a href="http://www.corwm.org.uk/Pages/Lnk\_pages/key\_issues.aspx">http://www.corwm.org.uk/Pages/Lnk\_pages/key\_issues.aspx</a> (accessed 30 November 2008).

<sup>&</sup>lt;sup>3</sup> Australian Nuclear Association, *Submission* 18.

<sup>&</sup>lt;sup>4</sup> ANSTO, Submission 5.

<sup>&</sup>lt;sup>5</sup> CoRWM, Key Issues, <a href="http://www.corwm.org.uk/Pages/Lnk\_pages/key\_issues.aspx">http://www.corwm.org.uk/Pages/Lnk\_pages/key\_issues.aspx</a> (accessed 30 November 2008).

recommence the site selection process for a waste facility in a genuinely consultative way, in line with more contemporary and democratic approaches being utilised overseas (and outlined in this report) that are based on community acceptance criteria.<sup>6</sup>

- 3.6 The International Atomic Energy Agency (IAEA) has analysed the implementation of geological nuclear waste disposal programs around the world.<sup>7</sup> It examined what factors helped or hindered radioactive waste disposal proposals in countries including Canada, the UK, the USA, Germany, Sweden, Finland and Japan. Although the study was looking at high level waste facilities, several conclusions drawn from this study would seem relevant to Australia's situation, particularly in relation to how the process should operate, and how governments should conduct those processes.
- 3.7 The IAEA suggested that site selection processes that were not 'socially acceptable' were more likely to need to be recommenced, with changed procedures based on the need for social factors to play a more significant role. It endorsed stepwise processes that allowed stakeholders to assimilate information and reassess proposals, and noted that a low and intermediate-level waste process in Switzerland that had not done this had been a negative experience. They describe evidence of a shift amongst regulators and implementers of waste sites toward being more 'open, transparent, respectful and fair'. 10
- 3.8 Successful processes in other countries place more emphasis on community participation. They make voluntary involvement a cornerstone of their processes. McCombie and Tveiten, conducting research for Canada's Nuclear Waste Management Organisation (NWMO), reported that Sweden's waste management organisation, SKB, 'agreed to voluntarily accepting that a public veto on siting would be regarded as binding on the repository implementer'. They argued that that this might have been a reason that the Swedish site selection process has been relatively successful.<sup>11</sup>

NSW Parliament, Joint Select Committee on the Transportation and Storage of Nuclear Waste, *Inquiry into the transportation and storage of nuclear waste*, February 2004, p. xiv.

IAEA, Factors Affecting Public and Political Acceptance for the Implementation of Geological Disposal, IAEA-TECDOC-1566, IAEA, Vienna, October 2007, p. 44.

<sup>10</sup> IAEA, Factors Affecting Public and Political Acceptance for the Implementation of Geological Disposal, IAEA-TECDOC-1566, IAEA, Vienna, October 2007, p. 45.

<sup>&</sup>lt;sup>7</sup> IAEA, Factors Affecting Public and Political Acceptance for the Implementation of Geological Disposal, IAEA-TECDOC-1566, IAEA, Vienna, October 2007.

<sup>&</sup>lt;sup>9</sup> IAEA, Factors Affecting Public and Political Acceptance for the Implementation of Geological Disposal, IAEA-TECDOC-1566, IAEA, Vienna, October 2007, p. 45.

Charles McCombie & Bengt Tveiten, A Comparative Overview of Approaches to Management of Spent Nuclear Fuel and High Level Wastes in Different Countries, NWMO Background Paper 7-6, 2004, p. 41, <a href="http://www.nwmo.ca/Default.aspx?DN=ce9fc07c-44f2-49a8-8ddf-ae888b1057c2">http://www.nwmo.ca/Default.aspx?DN=ce9fc07c-44f2-49a8-8ddf-ae888b1057c2</a> (accessed 30 October 2008).

3.9 The UK's independent Committee on Radioactive Waste Management (CoRWM) examined the process for selecting waste disposal facility sites. Its recommendations (accepted by the UK government) dealt most extensively with the social and political aspects of the site selection process. They are worth quoting at length:

Recommendation 9: There should be continuing public and stakeholder engagement, which will be essential to build trust and confidence in the proposed long-term management approach, including siting of facilities.

Recommendation 10: Community involvement in any proposals for the siting of long-term radioactive waste facilities should be based on the principle of volunteerism, that is, an expressed willingness to participate.

Recommendation 11: Willingness to participate should be supported by the provision of community packages that are designed both to facilitate participation in the short-term and to ensure that a radioactive waste facility is acceptable to the host community in the long-term. Participation should be based on the expectation that the well-being of the community will be enhanced.

Recommendation 12: Community involvement should be achieved through the development of a partnership approach, based on an open and equal relationship between potential host communities and those responsible for implementation.

Recommendation 13: Communities should have the right to withdraw from this process up to a pre-defined point.

Recommendation 14: In order to ensure the legitimacy of the process, key decisions should be ratified by the appropriate democratically elected body/bodies.

Recommendation 15: An independent body should be appointed to oversee the implementation process without delay.<sup>12</sup>

- 3.10 The UK has also conducted a major review of low-level waste management. Its policy does not specify that disposal is a preferred option, but emphasises design of the process, and risk management. The UK's policy principles include basing the preparation of LLW management plans on:
  - use of a risk-informed approach to ensure safety and protection of the environment;
  - minimisation of waste arisings (both activity and mass);
  - forecasting of future waste arisings, based upon fit for purpose characterisation of wastes and materials that may become wastes;
  - consideration of all practicable options for the management of LLW;
  - a presumption towards early solutions to waste management;

Committee on Radioactive Waste Management, *Managing our radioactive waste safely*, CoRWM, London, July 2006, p. 12.

- appropriate consideration of the proximity principle and waste transport issues; and
- in the case of long term storage or disposal facilities, consideration of the potential effects of future climate change. <sup>13</sup>
- 3.11 Canadian policy processes associated with both low-level and high-level waste problems involve a high degree of community engagement and initiative. They include community-initiated solutions to existing radioactive waste problems, <sup>14</sup> and the use of a community-focussed consultation process associated with high-level waste management, that keeps open options for both long-term storage as well as geological disposal. <sup>15</sup>
- 3.12 After several years of consultation the Canadians opted for adapted phased management (APM) as an approach to their nuclear fuel management. Adaptive Phased Management is a staged approach to dealing with nuclear wastes. The phases are:
  - maintain the used nuclear fuel at the reactor sites, while preparing for centralization at a site in an informed and willing community;
  - determine if an interim optional step of a shallow underground storage facility at the central site is desirable; and
  - locate and prepare a site to contain the used nuclear fuel in a deep repository with ongoing monitoring and the possibility of retrieval. 17
- 3.13 The Canadian model has included the establishment of an independent agency (the Nuclear Waste Management Organization) to facilitate waste management facility development, and has incorporated emerging ideas about the value of deliberative democratic processes to facilitate and empower communities and stakeholders in the policy process.<sup>18</sup>

Low Level Radioactive Waste Management Office, *Port Hope Area Initiative*, <a href="http://www.llrwmo.org/en/porthope/porthope.html">http://www.llrwmo.org/en/porthope/porthope.html</a> (accessed 30 November 2008).

\_

Department for Environment, Food and Rural Affairs (DEFRA), Department of Trade and Industry (DTI) and the Devolved Administrations, *Policy for the Long Term Management of Solid Low Level Radioactive Waste in the United Kingdom*, 2007.

Natural Resources Canada, *Adaptive Phased Management*, Media Release Backgrounder 2007/50 (a), <a href="http://www.nrcan-rncan.gc.ca/media/newcom/2007/200750a-eng.php">http://www.nrcan-rncan.gc.ca/media/newcom/2007/200750a-eng.php</a> (accessed 30 November 2008).

Natural Resources Canada, *Adaptive Phased Management: Backgrounder*, Media statement 2007/50(a), <a href="http://www.nrcan-rncan.gc.ca/media/newcom/2007/200750a-eng.php">http://www.nrcan-rncan.gc.ca/media/newcom/2007/200750a-eng.php</a> (accessed 30 October 2008).

Natural Resources Canada, *Adaptive Phased Management: Backgrounder*, Media statement 2007/50(a), <a href="http://www.nrcan-rncan.gc.ca/media/newcom/2007/200750a-eng.php">http://www.nrcan-rncan.gc.ca/media/newcom/2007/200750a-eng.php</a> (accessed 30 October 2008).

Genevieve Johnson, 'The discourse of democracy in Canadian nuclear waste management policy', *Policy Sciences*, Vol. 40, 2007, pp 70-99.

3.14 The committee believes that the emphases internationally on waste minimisation, voluntary participation, and on storage and retrieval (particularly for materials such as the reprocessed fuel Australia will be managing from 2015), represent good practice approaches based on a longstanding literature that the Australian government can build upon.<sup>19</sup>

#### A new policy framework

- 3.15 All Australian jurisdictions face a dilemma. They currently are responsible for administering the storage of radioactive waste. For a quarter of a century, Australian governments agreed that there should be a national approach to the management of Australia's radioactive waste. Since the early 1990s, the Commonwealth has administered a process to select a site for storage or disposal of waste.
- 3.16 Despite the search for a national solution to radioactive waste, individual states and territories have never conceded that such an approach to selecting a site must mean that at least one of them will necessarily host a waste facility within its jurisdiction. The Northern Territory government showed some leadership in this respect, in indicating that it continues to support a national process and by not ruling out consideration of a waste facility within its borders.<sup>20</sup>
- 3.17 The committee notes that the Northern Territory, like most other jurisdictions, has in place laws that seek to prevent the construction of any nuclear waste management facilities. These laws reflect the lack of confidence states and territories are willing to place in site selection processes to date. A lack of consultation, noted by the NSW parliamentary select inquiry, was central to this culture of a lack of trust.
- 3.18 Relationships built on trust are crucial to an effective radioactive waste management policy. The committee agrees with the current government, and with many witnesses, that a new policy foundation is needed for addressing nuclear waste issues. The Australian Conservation Foundation expressed this need:

A new approach is needed. Community confidence, citizen rights, procedural and regulatory integrity, transparency, inclusive, contemporary and scientifically robust methodology all need to be restored in the process

Northern Territory Government, Submission 81.

For example, ed. R.E. Kasperson (ed.), *Equity Issues in Radioactive Waste Management*, Cambridge, MA: Oelgeschlager, Gunn & Hain, 1983; Kristin Schrader-Frechette, *Burying Uncertainty: Risk and the Case Against Geological Disposal of Nuclear Waste*, University of California Press, Berkeley, 1993; S.L. Albrecht and R.G. Amey, 'Myth-making, Moral Communities, and Policy Failure in Solving the Radioactive Waste Problem', *Society & Natural Resources* Vol. 12, 1999, pp 741–61; M.E. Kraft, 'Policy Design and the Acceptability of Environmental Risks: Nuclear Waste Disposal in Canada and the United States', *Policy Studies Journal* Vol. 28, No. 1, 2000, pp 206–18; Genevieve Johnson, 'The discourse of democracy in Canadian nuclear waste management policy', *Policy Sciences*, Vol. 40, 2007, pp 70-99.

of building a mature and effective approach to radioactive waste management in Australia.<sup>21</sup>

- 3.19 The committee agrees that all these points would be features of best practice radioactive waste management policy.
- 3.20 In the committee's view, the objectionable features of the existing Act include:
- The lack of consultation, and the breaching of undertakings given by the previous Commonwealth government, in the lead up to, and in the enactment of, the legislation;
- The removal of procedural rights of affected stakeholders;
- The suspension of operation of legitimate Commonwealth laws;
- The lack of transparency in the process;
- The discrimination against the Northern Territory as against all other jurisdictions, both states and territories; and
- The creation in only one jurisdiction of procedures to facilitate nominations.
- 3.21 The committee also believes that repealing the existing legislation, unless it is conducted simultaneously with the implementation of alternative arrangements, would be inadequate. There must be recognition that the current situation is not desirable:

The current situation in Australia whereby there are limited facilities for the disposal or long-term storage of radioactive waste forces holders of that material to store it in facilities which may be unsafe or insecure. That is not conducive to the safety and security of that material.<sup>22</sup>

3.22 The committee believes that the existing regime must be replaced with one that addresses these concerns. It also believes there is some urgency to this: it notes the division within Indigenous communities fostered by the existing Act, as well as health concerns raised by the Public Health Association. Repeal of the existing Act will be an important step in addressing these concerns. The committee also notes the scheduled return of reprocessed fuel waste next decade, and that it is desirable for a new policy framework to be in place and operating in preparation for managing this waste upon its return.

#### **Recommendation 2**

3.23 The committee recommends that the Act be repealed and replaced with legislation founded on the principles outlined in Recommendation 3. The committee recommends that this legislation should be introduced into the Parliament in the Autumn 2009 sittings.

-

ACF, Submission 85, p. 2.

ANSTO, Submission 5.

3.24 A new policy on radioactive waste should provide a fair, transparent and scientifically sound foundation on which Australia can conduct radioactive waste management. The committee believes that the evidence it has received, and international best practice, support several key features of this new policy approach.

#### **Recommendation 3**

- 3.25 The committee recommends that radioactive waste policy be placed on a new footing, relying on five key founding principles:
- It should be built on a foundation of trust through engagement with governments, stakeholders and communities;
- It should place an emphasis on voluntary engagement rather than coercion;
- It should be grounded in sound science and best technological and engineering practice;
- It should look to national solutions for national waste management challenges; and
- It should have a fair, equitable and transparent Commonwealth legislative foundation.

#### **Recommendation 4**

- 3.26 The committee recommends that legislation to replace the existing Act should have at least the following three key differences from the existing Act:
- It should not remove procedural rights and opportunities afforded to affected parties;
- It should not suspend the operation of relevant Commonwealth laws; and
- It should not discriminate against or target one jurisdiction over others.

Senator Anne McEwen Chair

# **Coalition Senators - Additional Comments/Dissenting Report**

#### Introduction

- 1.1 This inquiry highlights the Australian Labor Party's preference for platitudes and 'spin' over substance.
- 1.2 During the 2007 election campaign, Labor promised to repeal this legislation if elected to Government. It is now more than a year since the election, and Labor has not only failed to deliver on its promise but has also put politics ahead of the national interest by further delaying the establishment of a Commonwealth radioactive waste storage facility.
- 1.3 Labor's promise to repeal the *Commonwealth Radioactive Waste Management Act 2005* put electoral prospects ahead of science and the national interest.
- 1.4 Over the last year, however, the Rudd Labor Government has breached its faith and ignored the voices of the community it claimed it would protect through this repeal, failing to respond to or interact with key stakeholders and interested parties since the election.
- 1.5 The Northern Land Council maintains that the traditional owners overwhelmingly support the development of the radioactive waste disposal facility on the Muckaty site<sup>1</sup> and groups such as the Federation of Australian Scientific and Technological Societies (FASTS) highlight the degree of urgency with which Australia needs to develop a central radioactive waste facility<sup>2</sup>, whether at Muckaty or any of the three other sites under evaluation.
- 1.6 This inquiry has clearly highlighted the urgent need for a national facility, something which has been delayed by the 'spin over substance' tactics of the Rudd Labor Government that are endangering Australia's prospects of securing a suitable site for the radioactive waste we are committed to storing appropriately and safely.

<sup>&</sup>lt;sup>1</sup> Mr Ron Levy, Northern Land Council, *Committee Hansard*, 17 November 2008, p. 14.

<sup>&</sup>lt;sup>2</sup> Mr Bradley Smith, FASTS, *Committee Hansard*, 28 November 2008, p. 2.

#### Historical context

- 1.7 Radioactive waste, and the associated need to manage it safely and appropriately, arises from the use and production of radioactive materials.
- 1.8 Radioactive materials have a variety of important uses in industry, agriculture, sterilisation, even in our homes, but perhaps most importantly in medicine.

"Radioisotopes are mainly used in diagnosis of various cancers, heart disease, neurodegenerative disease, which is becoming an increasingly important issue in Australia. An early diagnosis of those diseases is crucial to survival rates.

Nuclear medicine is essential. Doctors – not us – decide it is an essential part of their armoury for dealing with those sort of diseases, and we cannot see that changing in the short or medium term. A small percentage of radioisotopes are used for treatment of cancers."

- 1.9 Australia generates low level and intermediate level radioactive waste.
- 1.10 A coordinated search, initiated by a Federal Labor Government in the early 1990s, for a site for a single national radioactive waste facility initially had support from state and territory governments.
- 1.11 Coalition Senators express their disappointment that, despite the initial support, a lack of cooperation from the states and territories forced the Howard Coalition Government to abandon this approach in 2004.<sup>4</sup>
- 1.12 Coalition Senators are broadly in agreement with newspaper editorials at the time strongly critical of the cheap and populist positions adopted by Labor premiers at the expense of the national interest:
  - "... the unanimous opposition of the Labor premiers to a nuclear waste dump on their own patch is cheap populism. It represents an abject cave-in to deep-green scaremongering ... A do-it-somewhere-else attitude might give each of the individual premiers political traction in their own backyard, but where does it leave the nation?"<sup>5</sup>

<sup>&</sup>lt;sup>3</sup> Mr Steven McIntosh, Australian Nuclear Science and Technology Organisation, Committee Hansard, 28 November 2008, p. 17.

<sup>&</sup>lt;sup>4</sup> The Hon John Howard MP, 'Radioactive waste management', media release, 14 July 2004.

<sup>&</sup>lt;sup>5</sup> The Australian, 16 July 2004, p. 12.

1.13 Federal Labor stood by while State Labor Governments, most notably South Australia, played politics with and derailed a national, scientifically based approach, only to take a position that it would recommence the process, a position that again rightly met with media criticism.

"Labor leader Mark Latham ... says a Labor Government would move to establish a national repository, but would start the process all over again because the one that selected the Woomera site was flawed. He seems to forget that the process was instigated at least 12 years ago by a Labor Government. A briefing on it would have told him that it was as slow, deliberate, transparent and scientifically thorough as it could be ..."

1.14 For Federal Labor to have pledged in 2007 that it would walk away from the current potential sites and recommence the process is no less ridiculous and worthy of criticism than was Federal Labor's position under Mark Latham in 2004.

#### Labor's political games

"The people of the Northern Territory elected the Labor Party. We were led to believe that the nuclear waste thing would be all overturned and overruled, and at this moment we are extremely disappointed."

- 1.15 Labor promised during the election campaign, as traditional owner Ms Marlene Bennett recalls, to change the legislation if elected to office.
- 1.16 Labor's then spokesman on the environment, Peter Garrett, said:

'the only way to guarantee there will be no nuclear reactor or waste dump in your local community is to elect a Rudd Labor Government.'8

1.17 However, since Labor's election to office, they have failed even to interact with any of the key stakeholders in relation to this issue. This approach has seen the Rudd Labor Government losing the trust of the community and important organisations starting to question its credibility in this key area of national interest.

"It is a profound disappointment to the ACF – I know that it is a great and daily disappointment to people in those affected areas – that it has not moved forward.

-

<sup>&</sup>lt;sup>6</sup> The Canberra Times, 17 July 2004, p. 10.

<sup>&</sup>lt;sup>7</sup> Ms Marlene Bennett, Muckaty traditional owner, *Committee Hansard*, 17 November 2008, p. 6.

<sup>&</sup>lt;sup>8</sup> Mr Peter Garrett, August 2007, as quoted in Submission No. 95, attachment 10, Muckaty Traditional Owners.

I suppose there is a sense that the action minister has an approach that is not inclusive or free flowing with information. If the minister cannot deliver on a clear government promise we hope that the government can deliver on that promise..."<sup>9</sup>

#### **Northern Land Council**

- 1.18 The Northern Land Council is:
  - "...a statutory authority whose primary function under the *Land Rights Act* and the *Native Title Act 1993* is to represent the interests and position of traditional Aboriginal owners regarding their country, including by negotiating agreements regarding Aboriginal land with their consent." <sup>10</sup>
- 1.19 The Northern Land Council does not support the repeal of the current legislation, which allows Aboriginal communities to self nominate their lands for possible site selection, as it believes a proper community consultation was conducted with the traditional owners, as identified by anthropological evidence, and
  - "... that under Aboriginal tradition, the group with ultimate authority regarding that land overwhelmingly supported the nomination and that remains our view.'11
- 1.20 Repeal of the *Commonwealth Radioactive Waste Management Act 2005* would render the process of the nomination of Muckaty invalid.
- 1.21 Coalition Senators are firmly of the view that neither this Bill nor this inquiry is an appropriate mechanism by which to make any judgements in relation to ownership. These judgements are rightly determined by properly constituted Land Councils and any concerns about their efficacy in this regard should be addressed through their processes and supporting legislation.
- 1.22 The Northern Land Council Chief Executive Officer, Kim Hill, has stated:

"It's the right of those Traditional Owners to do business." 12

<sup>11</sup> Mr Ron Levy, Northern Land Council, *Committee Hansard*, 17 November 2008, p. 14.

<sup>&</sup>lt;sup>9</sup> Mr Dave Sweeney, Australian Conservation Foundation, *Committee Hansard*, 28 November 2008, p. 31.

<sup>&</sup>lt;sup>10</sup> Submission No. 96, Northern Land Council, p. 2.

<sup>&</sup>lt;sup>12</sup> Submission No. 96, Northern Land Council, p. 4.

1.23 Repealing the *Commonwealth Radioactive Waste Management Act 2005* would effectively disenfranchise the Council, the body facilitating and enabling the traditional owners to make decisions about their land.

#### **Conclusion**

- 1.24 Labor has ignored this problem, of its own creation due to political posturing during the federal election, for the past twelve months. The Labor party will stand condemned if it fails to deliver a solution.
- 1.25 Whether that solution is the Muckaty site, any of the three possible sites on defence land in the Northern Territory or indeed a site such as Woomera in South Australia (which would have been a real test of cooperative federalism) should be left for scientists and other experts to determine.
- 1.26 However, what is clear is that a decision is required soon and a 'back to the future' approach from Labor where we start this debate all over again would not be in the national interest.

#### Recommendations

- 1.27 That the Rudd Labor Government walk away from its reckless and politically motivated election promise to repeal the *Commonwealth Radioactive Waste Management Act 2005* and apologise to the people of the Northern Territory for having misled them.
- 1.28 That the Rudd Labor Government follow through on the process initiated by the former Coalition Government or immediately announce a solution to this issue that can be achieved as soon as possible.

Senator Simon Birmingham (Deputy Chair) LP, South Australia

Senator the Hon. Judith Troeth LP, Victoria

#### Additional Comments - Senator Scott Ludlam

This inquiry was initiated to investigate whether or not the *Commonwealth Radioactive Waste Management Act 2005* should be repealed.

After exposing the extraordinarily coercive nature of the legislation, its deficiencies and consequences, the Committee has recommended that this discriminatory and flawed legislation be repealed in the first few Parliamentary sitting weeks of 2009.

The Committee has also outlined an entirely new approach to finding a solution to this complex and long standing problem, a process founded on rigorous consultation, voluntary consent, environmental credibility, and which utilises best practice models tested internationally.

Given such a strong case is made in the report for the repeal of the Commonwealth Radioactive Waste Management Act 2005 (CRWMA), the Greens would have preferred for the Committee to recommend that it be repealed immediately. The Greens see no need to bind the repeal to the simultaneous introduction of replacement legislation. The absence of the CRWMA would not impact, preclude or undermine the process of establishing the scientific, transparent, accountable and fair process promised by the government. The repeal should occur immediately, to remove the unconscionable stress which has been placed on Northern Territory communities, with replacement legislation following as soon as possible subsequent to the repeal.

Australia has never had the debate about the most appropriate management strategy for the very long-lived radioactive wastes produced in nuclear reactors. Instead, we have been through several dead-end variations of the debate on which remote community should host a radioactive waste dump. The fact is that the case has never been made that remote dumping is the most appropriate strategy for radioactive waste management; it has become the default position of an industry and its political advocates seeking to rid itself of an intractable headache.

Evidence presented to the committee on the wisdom of remote dumping of long-lived radioactive wastes took a contradictory character. On the one hand, remote sites were promoted by some witnesses because of the unique risks associated with radioactive waste:

**Senator LUDLAM-** ...is it the case that we are looking for the stable geology and distance from groundwater sources [because] there is no form of engineered containment that can hold this material for the time periods that are required?

**Mr McIntosh**—For low-level waste, it is not such an issue.

**Senator LUDLAM**—Yes, but for the long-lived, intermediate or high-level waste, it is?

Mr McIntosh—Yes.<sup>1</sup>

...

**Dr Harries**—One does not want a population centre to overgrow the area. It is all part of the safety aspect.

**Senator PRATT**—Is that because there are particular risk factors attached to it? What is the safety argument?

**Dr Harries**—The safety argument is that one does a safety case for a facility like this, and one looks at different potential things that might go wrong. If things go wrong, then you want to be able to control it.

**Senator PRATT**—Okay. What kinds of things are you talking about when you talk about micro level?

**Dr Harries**—I guess there is failure of the concrete, failure of the material, failure of the containment, the weather conditions, and some factor you have not thought about.<sup>2</sup>

Essentially, the case was put that the material is safe enough to generate in Sydney but so hazardous in the long term that it should be taken as far from population centres as possible in order that eventual contamination not threaten too many people.

This is consistent with the approach taken by the Pangea consortium who sought to establish a high level commercial dump for international radioactive waste. In recognition that no form of engineered barrier could conceivably contain this thermally hot, corrosive, chemically toxic and radioactive material for tens of thousands of years, the Pangea group sought remote sites with simple stratified geology, as far from population centres as possible.

The acknowledgement that the inevitable failure of engineered storage was part of the rationale for seeking a remote site is captured in Pangea's promotional video: <a href="http://www.anawa.org.au/waste/pangea.html">http://www.anawa.org.au/waste/pangea.html</a>

The 'out of sight, out of mind' approach which accepts the creation of radioactive sacrifice zones is naturally fiercely contested by host communities, which has led to a history – in Australia and overseas – of failed attempts to force radioactive waste dumps on unwilling communities.

\_

<sup>&</sup>lt;sup>1</sup> McINTOSH, Mr Steven, Senior Adviser, Government Liaison, Australian Nuclear Science and Technology Organisation

<sup>&</sup>lt;sup>2</sup> HARRIES, Dr John, Past President, Australian Nuclear Association

The following exchange demonstrates the logical conclusion of such an approach: if people everywhere will resist any attempt to impose a waste dump in their backyard, sooner or later the Government will overrule one community or another and use more coercive means to achieve this policy objective.

Mr Smith—The history of discussion about a facility since 1979 shows that all communities have reacted strongly, or there has been activism from communities. South Australia, three or four years ago, was a recent example. At some point a decision has to be made. I understand your argument. I am just saying that there is an obstinate fact here. We have radioactive waste. It is not stored on an optimal basis. We need a national facility or a commonwealth facility to do that. That means hard decisions have to be made.

**Senator PRATT**—You are arguing that at some point, because there will inevitably be community opposition to such a site, the scientific factors in terms of the demand for a site are going to have to override a community mandate to locate the site.

Mr Smith—Yes.<sup>3</sup>

A number of witnesses acknowledged that siting of remote dumps had more to do with political considerations than any scientific or technical constraints:

**Mr McIntosh**—We cannot really comment upon that policy process. We understand, and I know that you say to leave politics aside, but politics frankly was the determining factor.

• • •

**CHAIR**—So then why does Australia mainly look at remote sites? **Mr McIntosh**—I believe it is for political reasons, Senator.<sup>4</sup>

...

**Mr Smith**—It would appear to be that politically the pragmatics seem to be that that is the only viable site at the moment that I am aware of for a Commonwealth facility.<sup>5</sup>

<sup>&</sup>lt;sup>3</sup> SMITH, Mr Bradley, Executive Director, Federation of Australian Scientific and Technological Societies

<sup>&</sup>lt;sup>4</sup> McINTOSH, Mr Steven, Senior Adviser, Government Liaison, Australian Nuclear Science and Technology Organisation

<sup>&</sup>lt;sup>5</sup> SMITH, Mr Bradley, Executive Director, Federation of Australian Scientific and Technological Societies

When questioned on the feasibility of returning the reprocessed spent fuel to the Lucas Heights facility in Sydney, ANSTO acknowledged that there were no technical barriers to doing so.

**Senator LUDLAM**—.... Can you turn to the question of the spent fuel or the reprocessed material that is to be returned from overseas. What would be the constraints on ANSTO should that material be returned to Lucas Heights rather than to a remote dump? What would you need to provide on-site?

**Mr McIntosh**—We would have to build a facility similar in nature to the proposed store for the Commonwealth facility.

**Senator LUDLAM**—Is there anything technical preventing that from occurring, leaving politics to one side?

Mr McIntosh—No.

**Senator LUDLAM**—Has ANSTO or any other agency ever done a full assessment of what that would look like?

**Mr McIntosh**—No. There is been a full assessment done of what it would look like at the Commonwealth site, and presumably it would look the same, but we have not done any planning for such an action on-site because we have been told by government—and at the end of the day we are directed by government—that this waste will not be returning to our site. Why would we waste resources planning for something we have been told will not happen?<sup>6</sup>

The Greens do not believe that the nuclear industry – in Australia and around the world – has ever demonstrated that remote dumps are the most appropriate solution for the disposal of radioactive waste. At some time in the future this may become the case – if the industry is able to demonstrate, for example, that the waste can be safely contained for the long time periods in question.

However, for as long as the industry is unable to demonstrate that it has found a safe way of guaranteeing safe isolation of radioactive waste for tens of thousands of years, the Greens believe the material should remain on-site, close to the point of production, where it can be monitored, re-packaged as necessary, and subjected to as little transport and movement as possible.

This option essentially allows for the greatest future flexibility, and does not foreclose potential future management options which may arise as waste management technologies evolve (for example through synroc, nanotechnology, transmutation or some other technique).

<sup>&</sup>lt;sup>6</sup> McINTOSH, Mr Steven, Senior Adviser, Government Liaison, Australian Nuclear Science and Technology Organisation

This is not necessarily an argument for the long-term 'disposal' of this waste at the Lucas Heights facility either; ANSTO has acknowledged that the feasibility of this option has never been evaluated.

The essential point is that whatever process arises from the current debate over the repeal of the CRWMA, it should not simply repeat the mistakes of the past in proceeding to the foregone conclusion that a remote community will one day host a radioactive waste dump, and that it's simply a question of whom. A much broader field of options must be assessed, leaving open the possibility that in the light of a properly constituted deliberative process, the decision may be taken to forestall final 'disposal' until such time as the industry can prove such a facility will be safe.

Senator Scott Ludlam AG, Western Australia

## **Appendix 1**

# **Submissions, Tabled Documents and Additional Information**

#### **Submissions**

1	Ms	Judy	B	lyt	h
---	----	------	---	-----	---

- 2 Australian Uranium Association
- 3 Ms Karin Ochsner
- 4 Ms Judith Cullity
- 5 Australian Nuclear Science and Technology Association (ANSTO)
- 6 Central Land Council
- 7 Ms Julie Matheson, CFP, Sovereign Bridge Pty Ltd
- 8 Ms Susan Ambler
- 9 Ms Sandra Betts
- 10 Ms Alana Parrott-Jolly
- 11 Mr Nick Koukourou
- 12 Ms Monique Fabris
- 13 Ms Dawn Jecks
- 14 Ms Elke Stegemann
- 15 Mr Rufus Coffield-Feith
- 16 Ms Jessica Felix
- 17 Ms Kerrie-Ann Garlick
- 18 Australian Nuclear Association
- 19 Mr Marcus Atkinson
- Women's International League for Peace and Freedom (Australian Section) Inc
- 21 Mr Brendan Cahill
- 22 Ms Leonie Chester
- 23 Top End Aboriginal Conservation Alliance
- 24 Ms Karin Geradts
- 25 Friends of the Earth Sydney
- Ms Marion Giles
- 27 Ms Kristin Knorr
- 28 Mr Anson Antriasian
- 29 Ms Michele Madigan
- 30 Katherine Town Council
- 31 Ms Margaret Smyrnis
- 32 Ms Emily Mercer
- 33 Medical Association for the Prevention of War (Northern Territory Branch)
- 34 Ms Edwina Howell
- 35 Arid Lands Environment Centre, Inc
- 36 Environment Centre NT

- 37 Ms Olivia Nigro
- 38 Medical Association for Prevention of War (Australia)
- 39 Ms Jessica Morrison
- 40 Ms Anna McIldowie
- 41 Ms Petrena and Mr Alex Ariston
- 42 Ms Katie Beruldsen
- 43 Blue Mountains Nuclear Free Group
- 44 Ms Lisa Hall
- 45 Mr Andrew Longmire
- 46 Mr Peter and Ms Christine Holmes
- 47 Ms Kate Holmes
- 48 Ms Liz Denborough
- 49 Alderman Jane Clark
- 50 Friends of the Earth Adelaide
- 51 Mr Leonard J Aronsten
- 52 Nicky Schonkala
- 53 Ms Cheryl and Mr Keith Kaulfuss
- 54 Ange Parrish
- 55 Mr John Goodall
- Ms Janet Pierce
- 57 Oxfam Australia
- 58 Ms Amelia Young
- 59 Mr Adrian Hyland
- 60 Ms Belinda Lang
- 61 Dr Tom Keaney
- 62 Mr Benedict Keaney
- 63 Mr Daniel-John Peterson
- 64 Australian Student Environment Network
- 65 Mr Pete Allsop
- 66 Mr Tony Backhouse
- 67 Mr Scott Foyster
- 68 Aly de Groot
- 69 Ms Mandy Webb
- 70 Ms Marlene Hodder
- 71 Ms Laura Metcalf and Mr Luke Ariston
- 72 Working Group for Aboriginal Rights (WGAR)
- 73 Federation of Australian Scientific and Technological Societies (FASTS)
- 74 Friends of the Earth, Australia
- 75 Pindimar Bundabah Community Association
- 76 Ms Karen Drew
- 77 Mr Barry Utley
- 78 People for Nuclear Disarmament, Western Australia
- 79 Mr Derek Schild
- 80 Ms Thalia Collard
- 81 Northern Territory Government
- 82 Ms Georgie Stubbs

- 83 No Waste Alliance
- 84 Mr Stephen McMahon
- 85 Australian Conservation Foundation
- 86 Mr Gerry Wood MLA
- 87 Ms Vina Hornsby
- 88 Ms Mia Pepper
- 89 Miss Liz Howells
- 90 Anti-Nuclear Alliance of Western Australia
- 91 Mr Michael Henry
- 92 Ms Grusha Leeman
- 93 Alice Springs Town Council
- 94 Arid Lands Environment Centre Beyond Nuclear Initiative
- 95 Muckaty Traditional Owners
- 95A Muckaty Traditional Owners (Supplementary Submission)
- 96 Northern Land Council
- 96A Northern Land Council (Supplementary Submission)
- 97 Keelah Lam
- 98 Mr Nick Pastalatzis
- 99 The Radioactive Show Crew, 3CR Community Radio
- 100 Public Health Association of Australia
- 101 Dr Charlie Carter
- 102 Ms Waratah Rose Gillespie
- 103 Muckaty Traditional owners opposed to the proposed radioactive waste facility

#### **Tabled Documents**

'Living Country' DVD, tabled by the Central Land Council, 17 November 2008

Statement from Katherine Nuclear Dump Action, Group, tabled by the Arid Lands Environment Centre/Beyond Nuclear Initiative, 17 November 2008

Copy of letter to Senate Employment, Workplace Relations and Education Committee dated 18 November 2005, tabled by Alice Springs Town Council, 17 November 2008

A New Clear Direction: Securing Nuclear Medicine for the Next Generation – A study by the Medical Association for Prevention of War, tabled by the Australian Conservation Foundation, 28 November 2008

List of Recommendations and Executive Summary from the Parliament of New South Wales Joint Select Committee on the Transportation and Storage of Nuclear Waste Report, *Inquiry into the Transportation and Storage of Nuclear Waste*, Report No. 53/01, tabled by Friends of the Earth, 28 November 2008

#### **Additional Information**

Parliament of New South Wales Joint Select Committee on the Transportation and Storage of Nuclear Waste – Report No. 53/01 – February 2004, *Inquiry into the Transportation and Storage of Nuclear Waste* 

## Appendix 2

## **Public Hearings**

#### Monday, 17 November 2008 – Alice Springs

#### Muckaty traditional owners

Ms Dianne Stokes Ms Marlene Bennett

#### **Central Land Council**

Mr David Ross, Director

Ms Audrey McCormack

Mr Steven McCormack

Ms Kath Martin

Mr Mervyn Rubuntja

Mr William Tilmouth

Mr Ken Tilmouth

#### **Northern Land Council**

Mr Samuel Bush-Blanasi, Deputy Chairman

Mr Kim Hill, Chief Executive Officer

Mr Ron Levy, Principal Legal Officer

Mr Graeme Smith, Special Projects Officer, Borroloola-Barkly Region

#### **Arid Lands Environment Centre/Beyond Nuclear Initiative**

Ms Natalie Wasley Mitch

#### **No Waste Alliance**

Mr Justin Tutty

#### **Alice Springs Town Council**

Alderman Jane Clark Mr Rex Mooney, Chief Executive Officer

#### Tuesday, 18 November 2008 – Alice Springs

#### Australian Nuclear Free Alliance and Top End Aboriginal Conservation Alliance

Miss Donna Jackson, Co-chair, Australian Nuclear Free Alliance and Coordinator, Top End Aboriginal Conservation Alliance

## Public Health Association of Australia and Medical Association for Prevention of War

Mr Clive Rosewarne, NT Branch Executive Member, Public Health Association of Australia

Dr Hilary Tyler, Medical Association for Prevention of War

# Department of Natural Resources, Environment the Arts and Sport, Northern Territory Government

Dr Diana Leeder, Executive Director, Natural Resource Management

# Mr Gerry Wood, Member, Legislative Assembly, Northern Territory (Private Capacity)

#### Friday, 28 November 2008 – Canberra

#### Federation of Australian Scientific and Technological Societies

Mr Bradley Smith, Executive Director

#### **Australian Nuclear Science and Technology Organisation (ANSTO)**

Mr Steven McIntosh, Senior Adviser, Government Liaison

Mr Lubi Dimitrovski, Manager, Waste Operations

#### **Australian Nuclear Association**

Dr John Harries, Past President

#### **Australian Conservation Foundation**

Mr Dave Sweeney, Campaigner

#### Friends of the Earth

Ms Michaela Stubbs, Nuclear Campaigner

### **Department of Resources, Energy and Tourism**

Ms Marie Taylor, General Manager, Fuels and Uranium Branch

Mr Patrick Davoren, Manager, Radioactive Waste Management Section

Mr Stephen Jones, Assistant Manager, Radioactive Waste Management Section, Fuels and Uranium Branch