

# **PROPOSED RADIOACTIVE WASTE DUMP AT MUCKATY, NT**

## **BRIEFING PAPER FEBRUARY 2011**

Jim Green B.Med.Sci.(Hons.), PhD  
National nuclear campaigner - Friends of the Earth, Australia  
0417 318 368  
jim.green@foe.org.au  
PO Box 222, Fitzroy, Victoria, 3065.  
www.foe.org.au/anti-nuclear

### **1. Introduction**

### **2. Dumping on Democracy – The National Radioactive Waste Management Bill**

### **3. Muckaty Traditional Owners**

### **4. Federal Court Action**

### **5. A Responsible Approach to Radioactive Waste Management**

### **6. Breaches of ALP Platform Policy Commitments**

### **7. Nuclear Medicine**

### **8. Australia's Nuclear Waste**

### **9. Nuclear Waste Hazards**

### **10. The Northern Land Council's Conflict of Interest**

### **11. More Information**

## **1. INTRODUCTION**

The Labor Government plans to establish a national radioactive waste dump at Muckaty, 120 kms north of Tennant Creek in the Northern Territory. There are many concerns with the proposal, including:

- \* The opposition of many Traditional Owners to the proposal, and the unwillingness of the Government to listen to their concerns and to include them in decision-making processes.
- \* Draconian legislation which overrides Aboriginal heritage and environmental protection laws and overrides all state/territory laws.
- \* The failure of the Government to establish the need for a national repository.
- \* The failure of the Government to carry out a site-selection process based on scientific and environmental criteria.
- \* Multiple breaches of binding ALP platform policy commitments.

## **2. DUMPING ON DEMOCRACY – THE NATIONAL RADIOACTIVE WASTE MANAGEMENT BILL**

Federal Resources Minister Martin Ferguson is driving the plan for a radioactive waste dump at Muckaty. The legislation he has put forward – the National Radioactive Waste Management Bill – is heavy-handed and undemocratic. The NT Central Land Council says the Government is pursuing "an approach characterised by the desire to find a politically expedient solution, contempt for state and Territory laws, and disregard for decision making processes enshrined in the Land Rights Act."

The Government plans to ignore and override legislation passed in the NT Parliament which seeks to ban the imposition of nuclear dumps – the Northern Territory Nuclear Waste Transport, Storage and Disposal (Prohibition) Act 2004. The NT Government remains steadfastly opposed to the dump plan. NT Chief Minister Paul Henderson states: "Public consultation should establish public consent — not the consent of a handful of people but broad-based public consent."

On December 22, 2010, the House of Representative's Climate Change, Environment and the Arts Standing Committee's report on the NRWMB was tabled. The committee refused to hear or receive submissions from the public or from Muckaty Traditional Owners. The Committee did not address any of the substantive concerns with the Bill. The timing was clearly a cynical attempt to avoid public scrutiny as the inquiry was not required to report until late March 2011. The report (including a dissenting report from the Australian Greens) is posted at [www.aph.gov.au/house/committee/ccea/radioactivewaste/report.htm](http://www.aph.gov.au/house/committee/ccea/radioactivewaste/report.htm)

The text of the National NRWMB, explanatory memoranda, second reading speeches, and a Bills Digest, are posted at <http://tiny.cc/0werx>. A November 2010 Parliamentary Bills Digest outlines the main provisions of the amended NRWMB. The Digest is posted at: [www.aph.gov.au/library/pubs/bd/2010-11/11bd052.htm](http://www.aph.gov.au/library/pubs/bd/2010-11/11bd052.htm)

The following points (and quotations) are drawn from the Parliamentary Bills Digest:

The Bill incorporates a requirement on the part of the Minister to accord 'procedural fairness' in relation to the nomination of a site for a repository, however the *"new requirement is not however unduly onerous – it necessitates the Minister inviting comment from specified persons or entities, and 'tak[ing] into account any relevant comments given'."*

*"In the event that the Minister makes an error of law in the processes applying to site nominations, approval of nominations, and selection of the preferred site, the Bill restores the right of an 'aggrieved person' to seek judicial review under the ADJR Act. However, the Bill also retains the current provisions of the Act that a failure to comply with certain procedural elements does not invalidate the nominations etc."*

*"The Bill retains the existing provisions of the Act that effectively exclude State and Territory laws from operating where they would 'regulate, hinder or prevent' the Commonwealth from doing work to investigate the suitability of potential sites and then the construction and operation of the proposed facility, including the transporting of radioactive materials."*

The Bill requires evidence of consultation and consent with the relevant traditional Aboriginal owners but *"a failure to comply with these elements does not invalidate a nomination, nor is the nomination disallowable by Parliament."*

The Bill states that the Minister can "at his or her absolute discretion" approve a nomination of a site and a failure to observe procedural elements does not invalidate the approval nor is it disallowable by Parliament.

*"New section 12 effectively excludes State and Territory laws from operating where they would 'regulate, hinder or prevent the doing of a thing authorised by section 11'. New section 12(1) does state that only certain types of State and Territory laws (eg laws relating to 'the use or proposed use of land or premises') are excluded, but the range of laws mentioned is so wide they are likely to give almost complete coverage. Indeed, even if a State or Territory law fell outside the type listed in new subsection 12(1), the law could be excluded by prescribing it under regulation ..."*

*"New subsection 13(1) provides that two Commonwealth laws, the Aboriginal and Torres Strait Islander Heritage Protection Act 1984 and the Environment Protection and Biodiversity Conservation Act 1999, have no effect where they would 'regulate, hinder or prevent the doing of a thing authorised by section 11'. Again a prescription power under regulation exists (subsection 13(2)) to allow for the exclusion of other Commonwealth laws, or parts of laws."*

*"The acquisition and/or extinguishment of rights and interests under new section 19 has effect despite any other law of the Commonwealth, State or Territory, including the Commonwealth's Lands Acquisition Act 1989 and the Native Title Act 1993 ..."*

*"New section 24 effectively excludes State and Territory laws from operating where they would 'regulate, hinder or prevent the doing of a thing authorised by section 23'. New subsections 24(1)-(2) do state that only certain types of State and Territory laws (for example, laws relating to 'the uses or proposed use of land or premises') are excluded, but again the range is so wide they are likely to give almost complete coverage. Even*

*if a State or Territory law fell outside the types listed in new subsections 24(1)-(2), the law could be excluded by prescribing it under regulation ..."*

The Bill also provides wide-ranging powers to override Commonwealth legislation.

The Bill entrenches Muckaty as the only site under active consideration for a repository although it has provisions for the nomination of sites anywhere in Australia.

### **3. MUCKATY TRADITIONAL OWNERS**

Mr Ferguson claims that Ngapa Traditional Owners support the nomination of the Muckaty site. However he knows that many of them oppose the dump. He received a letter opposing the dump in May 2009 signed by 25 Ngapa Traditional Owners and 32 Traditional Owners from other Muckaty groups. While some members of the Muckaty Land Trust support a national waste dump in return for cash benefits and access to improved services, many do not.

In 2008 the NT Labor Conference unanimously called on the Federal Government to exclude Muckaty from consideration as a dump site because the nomination "was not made with the full and informed consent of all Traditional Owners and affected people and as such does not comply with the Aboriginal Land Rights Act".

Senior ALP ministers including Jenny Macklin, Kim Carr, Peter Garrett and Warren Snowdon have acknowledged the opposition of many Muckaty Traditional Owners.

The Central Land Council states: "The Central Land Council is disappointed that this Bill validates the Muckaty nomination without acknowledging the dissent and conflict amongst the broader traditional owner group about the process and the agreement. It is not acceptable that access to procedural fairness continues to be excluded in relation to its existing nomination or approval."

Muckaty Traditional Owner Dianne Stokes says: "All along we have said we don't want this dump on our land but we have been ignored. Martin Ferguson has avoided us and ignored our letters but he knows very well how we feel. He has been arrogant and secretive and he thinks he has gotten away with his plan but in fact he has a big fight on his hands."

'Muckaty Voices' is a 10-minute video documentary that tells the story of the Muckaty Traditional Owners opposed to a radioactive waste dump on their country. It can be viewed online at [www.beyondnuclearinitiative.wordpress.com/video](http://www.beyondnuclearinitiative.wordpress.com/video).

### **4. FEDERAL COURT ACTION**

Led by Mark Lane Jangala, senior Ngapa Traditional Owners have initiated action in the Federal Court challenging the nomination of the Muckaty site.

Muckaty Station was formally returned to the traditional owners after a long land claim in 2001. The Aboriginal Land Commissioner Justice Gray determined that five traditional owner groups had joint and overlapping traditional ownership of Muckaty Station: the Ngapa, Wirntiku, Milwayi, Yapayapa and Ngarrka clans. However, the NLC and Government now claim that a single sub-group of one of these clans owns the relevant land for the waste dump, so that only their consent is required.

This claim of ownership, which is contrary to the findings of Justice Gray and the traditional knowledge of senior elders of the five clans, is based on a secret anthropologist report which the Commonwealth Government and the NLC refuse to release to the traditional owners.

Mr Lane Jangala has been campaigning along with many other traditional owners against the proposed site because of its cultural significance. "I am senior Ngapa man for Muckaty and I did not agree to the nomination of the site, along with other senior Ngapa elders for Muckaty Station who did not agree. We don't want it. There was not even a meeting in town to consult all of the traditional owners. I want to look after my Country and Dreaming, look after the Sacred Sites I am responsible for and to make sure my children are raised properly

in their Country," he said.

## **5. A RESPONSIBLE APPROACH TO RADIOACTIVE WASTE MANAGEMENT**

### 1. Waste minimisation

Firstly, it needs to be shown that radioactive waste is not being produced unnecessarily – that the benefits outweigh the risks. The Government has not even attempted to demonstrate a net benefit for the proposed nuclear dump.

### 2. All options for radioactive waste management should be considered

All options for radioactive waste management need to be considered – not just 'remote' repositories (always more remote for some people than for others).

The option of ongoing storage at the Lucas Heights site needs to be independently assessed. All relevant organisations have acknowledged that this is a viable option including Mr Ferguson's own department, the regulator ARPANSA, the Australian Nuclear Association, and ANSTO itself.

Requiring ANSTO to store its own waste is the best and perhaps the only way of focussing the organisation's mind on the importance of waste minimisation. It avoids the risks of transportation. It avoids double-handling – i.e. long-lived intermediate-level waste being moved to Muckaty only to be moved again should progress be made in relation to a deep geological repository which is the designated method of disposal for long-lived intermediate-level and high-level waste.

*"ANSTO is capable of handling and storing wastes for long periods of time. There is no difficulty with that."  
-- Dr Ron Cameron, ANSTO.*

*"We've got quite a number of buildings there which house radioactive materials. They're all stored safely and securely and all surrounded by a high-security perimeter fence with Federal Police guarding. It is the most secure facility we have got in Australia."  
-- Andrew Humpherson, ANSTO, September 2008*

*"It would be entirely feasible to keep storing it [radioactive waste] at Lucas Heights ..."  
-- Dr Clarence Hardy, Australian Nuclear Association, ARPANSA forum in Adelaide, February 26, 2004.*

*"Should it come about that the national approach to a waste repository not proceed, it will be necessary for the Commonwealth to devise an approach to final disposal of LLW from Lucas Heights, including LLW generated by operation of the RRR. In the meantime, this waste will have to be continued to be handled properly on the Lucas Heights site. I am satisfied, on the basis of my assessment of the present waste management plan, including the license and conditions applying to the waste operations on site, that it can be."  
-- then ARPANSA CEO John Loy, April 2002, "Decision by the CEO of ARPANSA on Application to construct the Replacement Research Reactor at Lucas Heights. Reasons for Decision", p.30.*

*"A significant factor is that ANSTO has the capacity to safely store considerable volumes of waste at Lucas Heights and is unlikely to seek the holding of frequent campaigns to disposal of waste holdings generated after the initial campaign."  
-- Department of Resources, Energy and Tourism, Application to ARPANSA, 2003, Vol.iii Ch.9 Waste – Transfer and Documentation p.5.*

### 3. Site selection processes must be fair and transparent.

If a site selection process for a waste management facility is required, it ought to be based on scientific and environmental criteria, as well as on the principle of voluntarism. When the federal Bureau of Resource Sciences conducted a national repository site selection study in the 1990s, the Muckaty area did not even make the short-list as a "suitable" site.

## 6. BREACHES OF ALP PLATFORM POLICY COMMITMENTS

Labor is in breach of its commitment to address radioactive waste management issues in a manner which is "scientific, transparent, accountable, fair and allows access to appeal mechanisms" and to "ensure full community consultation in radioactive waste decision-making processes".

Instead of basing management options on scientifically-based risk-benefit analyses of the various options, the Labor Government has assumed the need for a remote repository. Instead of a site-selection process based on scientific and environmental criteria, the Government has chosen the path of least political resistance by planning to establish a repository in the Northern Territory.

Examples of the lack of transparency include:

- \* Mr Ferguson's repeated refusal to meet with Traditional Owners opposing the dump.
- \* The failure to publicly release a contract between the former Howard Government and some Muckaty Traditional Owners.
- \* The failure to release the anthropological report – even Traditional Owners have been refused access to the report.

Far from being accountable, the NRWMB vests an extraordinary amount of power in the Minister including powers to override all state/territory laws.

The process has not met the fairness test. The NRWMB's requires 'procedural fairness' in relation to the nomination of a site for a repository, however the Minister is merely required to invite comments on a proposed nomination and is then free to ignore those comments.

In relation to appeal mechanisms, the Parliamentary Bills Digest states: *"In the event that the Minister makes an error of law in the processes applying to site nominations, approval of nominations, and selection of the preferred site, the Bill restores the right of an 'aggrieved person' to seek judicial review under the ADJR Act. However, the Bill also retains the current provisions of the Act that a failure to comply with certain procedural elements does not invalidate the nominations etc. "*

Lastly, consultation has been grossly inadequate. Mr Ferguson has refused repeated requests from Muckaty Traditional Owners to meet with them and he ignored the recommendation of a Senate committee report that he should meet with them. Mr Ferguson's latest excuse for ignoring Traditional Owners is that the matter is subject to legal action. He has also said that he will consult Traditional Owners *after* a decision has been made on the proposed Muckaty dump – a thorough reworking of the traditional concept of consultation.

The opposition of the NT Government has been ignored and the NT Government has not been kept informed about the federal Government's plans. Councils and communities along potential transport corridors have not been consulted. Mr Ferguson was asked to speak to NT residents about the dump proposal during a visit to Darwin in March 2009, but he chose instead to leave the building by the back door to avoid them.

## 7. NUCLEAR MEDICINE

The Government's claim that most of the waste to be sent to the NT is a by-product of nuclear medicine is false. The Medical Association for Prevention of War notes that the government has been "peddling a lie" by claiming that the nuclear dump would in any way facilitate the practice of nuclear medicine. For more information see the fact sheet produced by the Medical Association for Prevention of War:

[www.mapw.org.au/news/mapw-fact-sheet-debunks-medical-need-nt-nuclear-waste-dump](http://www.mapw.org.au/news/mapw-fact-sheet-debunks-medical-need-nt-nuclear-waste-dump)

Australia does not even need a research reactor for medical isotope supply let alone a nuclear waste dump (see [www.mapw.org.au/nuclear-chain/nuclear-medicine](http://www.mapw.org.au/nuclear-chain/nuclear-medicine)).

## 8. AUSTRALIA'S NUCLEAR WASTE

*Measured by radioactivity*, spent nuclear fuel reprocessing waste from Lucas Heights reactors accounts for over 90% of the waste the Government wants to dump in the NT. Although the volume of this waste is relatively small – some tens of cubic metres – it is by far the most radioactive material.

*Measured by volume*, two sources account for well over 90% of the radioactive waste that the Government wants to dump at Muckaty:

- \* ANSTO / Lucas Heights
- \* approx. 2000 cubic metres of very low-level radioactive waste (contaminated soil) stored at Woomera.

Other waste from Lucas Heights that the Government wants to dump in the NT includes:

- \* Over 5,000 drums of low-level radioactive waste.
- \* Over 200 cubic metres of intermediate-level solid waste, some with 'unknown radioactive inventory'.
- \* Several thousand cubic metres of radioactive 'non-compactable contaminated items', e.g. materials from decommissioned Lucas Heights reactors, pipes, machinery, etc.
- \* About 10 cubic metres of solidified molybdenum-99 long-lived intermediate-level waste.
- \* Approximately 130 drums per year of radioactive 'compactable low level solid waste', e.g. vials, gloves etc.
- \* Approximately 20 drums per year of solidified radioactive 'sludge' produced in the treatment of reactor wastewaters.
- \* Over 800 drums of 'historical wastes' including radioactive thorium, beryllium and uranium.

Waste from sources other than Lucas Heights includes:

- \* The 2000 cubic metres of radioactive contaminated soil currently stored at Woomera.
- \* Other Commonwealth Defence Department and CSIRO 'historic' radioactive waste. Approximate volumes are 210 cubic metres of low level radioactive waste and 35 cubic metres of intermediate level radioactive waste.

## 9. NUCLEAR WASTE HAZARDS

The Government wants to bury lower-level wastes in shallow trenches and store long-lived intermediate-level waste above ground at Muckaty. No progress has been made towards the final disposal of long-lived intermediate-level waste (via deep geological disposal) so the planned 'interim' storage in the NT could stretch many decades into the future.

Measured by radioactivity, long-lived intermediate-level waste arising from reprocessing spent nuclear fuel from reactors at Lucas Heights accounts for over 90% of the waste the Government wants to dump in the NT. The following table lists some of the radionuclides contained in nuclear fuel reprocessing waste:

NUCLEAR WASTE	HALF-LIFE
Plutonium-238	88 years
Americium-242m	152 years
Americium-241	432 years
Americium-243	7,380 years
Plutonium-239	24,065 years
Uranium-234	244,500 years
Uranium-235	703 million years
Uranium-238	4.46 billion years

Specific concerns with Muckaty include rainfall / water infiltration, and seismic risks. Dr Mike Sandiford from the School of Earth Sciences at Melbourne University states: "We occasionally get big earthquakes in Australia (up to about magnitude 7) and the big ones have tended to occur in somewhat unexpected places like Tennant Creek. The occurrences of such earthquakes imply that we still have much to learn about our earthquake activity. From the point of view of long-term waste disposal this is very important, since prior to the 1988 (M 6.8) quake, Tennant Creek might have been viewed as one of the most appropriate parts of the continent for a storage facility."

<http://www.abc.net.au/science/expert/realexpert/nuclearpower/08.htm>

When the federal Bureau of Resource Sciences conducted a national repository site selection study in the 1990s, the Muckaty area did not even make the short-list as a "suitable" site.

Nuclear engineers Alan Parkinson and John Large have warned that the proposed NT dump would be attractive to terrorists wanting to make a 'dirty bomb', a radioactive weapon delivered by conventional means.

*"There is very limited capacity within the Northern Territory hospital network outside of Darwin to respond to any radioactive waste incident or accident. ... The Port of Darwin does not have the resource capacity (expertise or equipment) to respond to a radioactive incident.*

*--- NT Government submission to 2010 Senate Inquiry*

## **10. THE NORTHERN LAND COUNCIL'S CONFLICT OF INTEREST**

The Northern Land Council (NLC) stands to gain financially if the Muckaty nomination proceeds. Thus the NLC has a real or apparent conflict of interest – on the one hand the Council stands to gain financially if the radioactive waste dump/store proceeds, on the other hand the Council is meant to represent the interests of all Traditional Owners regardless of their support for or opposition to the dump/store.

This conflict of interest is not of the NLC's making – it stems from government legislation concerning the financing of Land Councils and from agreement/s between the Commonwealth and the NLC.

The NLC's conflict of interest casts a pall over the legitimacy of the Muckaty nomination and related processes such as the secret anthropological report.

The NLC's conflict of interest may explain some unfortunate and otherwise inexplicable aspects of the process, e.g.:

- \* the NLC describing Traditional Owners opposed to the radioactive dump/store as "dissidents"
- \* the NLC's support for the Commonwealth Radioactive Waste Management Act 2005/06 legislation which inter alia allows the imposition of a radioactive dump/store without any consultation with or consent from Traditional Owners (which, in turn, calls into question whether the NLC was in breach of its statutory responsibilities).
- \* false statements such as the NLC's claim that "every Australian directly benefits from radiological medical treatment ...produced at Lucas Heights".

The NLC's conflict of interest may explain the anger and distress of numerous Traditional Owners. For example Marlene Bennett told a hearing of the Senate Environment, Communications and the Arts Legislation Committee: "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." (Alice Springs, 17/11/08.)

## **11. MORE INFORMATION**

Beyond Nuclear Initiative [www.beyondnuclearinitiative.wordpress.com](http://www.beyondnuclearinitiative.wordpress.com)

'Muckaty Voices' video documentary [www.beyondnuclearinitiative.wordpress.com/video](http://www.beyondnuclearinitiative.wordpress.com/video)

Friends of the Earth: [www.foe.org.au/anti-nuclear/issues/oz/nontdump](http://www.foe.org.au/anti-nuclear/issues/oz/nontdump) and [www.nuclearfreeways.org.au](http://www.nuclearfreeways.org.au)

2004 bipartisan NSW Parliamentary Inquiry [www.parliament.nsw.gov.au/nuclearwaste](http://www.parliament.nsw.gov.au/nuclearwaste)

Australian Conservation Foundation [www.dumpthedump.org.au](http://www.dumpthedump.org.au)

Federal Government: [www.radioactivewaste.gov.au](http://www.radioactivewaste.gov.au)

Government-commissioned 2009 'Transport Assessment Report' including possible transport routes  
<http://tiny.cc/vl2yk>

Senate Legal and Constitutional Affairs Committee inquiry into the February 2010 version of the NRWMB:  
[www.aph.gov.au/senate/committee/legcon\\_ctte/radioactivewaste/info.htm](http://www.aph.gov.au/senate/committee/legcon_ctte/radioactivewaste/info.htm).