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SUBMISSION TO SENATE INQUIRY INTO THE COMMONWEALTH RADIOACTIVE WASTE MANAGEMENT BILL 2008

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INTRODUCTION

Friends of the Earth has been actively involved with the national debate over radioactive waste management for over a decade and requests the opportunity to address a Senate hearing on this matter.

COMMONWEALTH RADIOACTIVE WASTE MANAGEMENT ACT

The Commonwealth Radioactive Waste Management Act and the 2006 amendments (hereafter CRWMA):

- * Explicitly remove all rights to "procedural fairness".
- * Remove rights of appeal under the Administrative Decisions (Judicial Review) Act.
- * Allow the imposition of a nuclear waste dump in the absence of *any* consultation with, or consent from, Aboriginal Traditional Owners.

- * Override the Aboriginal Land Rights Act, and in so doing remove the consultation requirements of the ALRA.
- * Prevent the Aboriginal and Torres Strait Islander Heritage Protection Act 1984 from having effect during investigation of potential dump sites, and excludes the Native Title Act 1993 from operating at all.
- * Override NT laws prohibiting transport and storage of nuclear waste.
- * Do away with a raft of environmental, public health and safety protections. For example the CRWMA overrides the the Environmental Protection and Biodiversity Act 1999 in relation to selecting a nuclear dump site.
- * The mechanism for site nominations and selection is protected from legal challenge by providing for "absolute discretion" by the Minister

The CRWMA Repeal Bill 2008 will repeal the Commonwealth Radioactive Waste Management Act 2005 and the related Commonwealth Radioactive Waste Management Legislation Amendment Act 2006.

Clearly the CRWMA amounts to a short-circuiting of due legal and political process. Similar undemocratic tactics did not advance the Howard government's plan to impose a radioactive waste dump in SA, in fact they led to the demise of that plan. The lessons from that fiasco seem not to have been learnt by the current government.

LABOR GOVERNMENT BREAKING PROMISES

Before the election, Labor Party politicians called the CRWMA 'sordid', 'shameful', 'arrogant' and worse. Therefore it is a disgrace that the Rudd Labor government has allowed resources and energy minister Martin Ferguson to not only stall on the repeal of the CRWMA, but also to actively employ the Act as the legislative framework for 2007/08 site selection studies in the NT.

The Labor government will most likely repeal the CRWMA when it has served its purpose of facilitating the imposition of a dump in the NT. Thus the Labor government's actions will be not only sordid, shameful and arrogant but also hypocritical.

Labor is also 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". There has been no indication from Mr Ferguson that he intends to abide by any of these Labor policy commitments. This was brought into sharp relief by his responses to written Senate questions in April 2008. Mr Ferguson refused to provide substantive answers to a large number of questions regarding nuclear waste management and his secrecy was such that even a question about what specific matters were under consideration was also said to be "under consideration".

PROPOSED NT DUMP SITES

The four potential dump sites in the NT were not chosen on the basis of any objective, scientific criteria let alone social acceptability criteria. None of the sites under consideration were short-listed when scientific and environmental criteria were used by the federal Bureau of Resource Sciences' National Repository Project in the 1990s which assessed alternative sites around Australia for a repository for low-level waste (LLW) and short-lived intermediate-level waste (SLILW) (see BRS 1997 site selection report).

The three original NT sites were chosen following consultation with the Defence

Department. No-one with any expertise relevant to the management of nuclear waste was consulted, nor any other stakeholders with an interest in the sites such as Traditional Owners and the NT government.

None of the four NT sites made the Howard government's short-list of 22 national sites under consideration for a store for long-lived intermediate-level waste (LLILW) such as spent fuel reprocessing waste.

All four sites fail any reasonable test of social acceptability given that the NT Parliament has legislated to prevent the imposition of a nuclear dump, and given local opposition around all four sites.

MUCKATY

Labor Senator Trish Crossin (5/12/06) spoke in Parliament about the relevance of the CRWMA to the Muckaty site in the NT, which has been short-listed for a nuclear dump:

"This is also about the five families who belong to Muckaty Station, three of whom live on adjoining land. Senator Scullion himself said—and I will be interested to see the Hansard at some stage—that this was about ensuring that anyone who was on land adjacent to the Northern Land Council boundaries could provide no objections. That is exactly the political reality of this bill. This bill is about cutting out all the people affected by Muckaty Station, not just some of the traditional owners but a majority of them—not the ones who live within the Northern Land Council boundary but the ones who live within the Central Land Council boundary. I have a copy of a letter that was written by those people to the chairperson of the Northern Land Council, Mr John Daly, back in July. It states:

'Dear Mr Daly,

We write to you with deep concern.

In the past, we have trusted the Northern Land Council (NLC) to protect our Homelands ...

Mr Daly, why are you talking to David Tollner and Nigel Scullion for us about our country? Why are you helping the Commonwealth Government to take control of our land to build a nuclear waste facility? ...

Mr Daly, we ask you to stop talking for us. We do not want a nuclear waste facility built on our land.'

This bill is exactly about silencing these traditional owners."

Jenny Macklin said in Parliament in November 2006:

"However, I am aware that there are a number of possible sites under consideration for nomination, one of which is a property known as Muckaty Station.

I am aware of this possibility because I have spoken to traditional owners and families from the property and surrounding areas, who asked to speak to me about the possible nomination of their lands for use as a nuclear waste dump.

These traditional owners oppose the nomination of Muckaty.

And these women expressed their considerable concern, indeed their distress, at this prospect, because they told me that they feel their rights, their views, their concerns and their lands are being trampled upon by this Government.

The Bill under consideration by the House today will magnify that distress, because it openly and harshly rips away the legal requirement that any nomination of indigenous land for a nuclear waste dump must have the full and informed consent of the traditional owners of that land."

The April 2008 NT ALP conference adopted this resolution:

"Conference understands the nomination of Muckaty as a potential radioactive dump site, made under the CRWMA legislation, 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 (ALRA). Conference calls for the Muckaty nomination to also be repealed when the CRWMA legislation is overturned."

Senator Kim Carr on the nomination of Muckaty as a potential dump site:

"Today's announcement is yet the next chapter in the decade-long saga of lies and mismanagement that has become Howard's waste dump." (Media release, 27/9/07)

A PUBLIC INQUIRY: A RESPONSIBLE ALTERNATIVE TO THE HOWARD/FERGUSON MODEL

In addition to the immediate repeal of the CRWMA, the government should initiate an inquiry as a necessary step to resolving the current situation and as a sign of good faith that the government has abandoned the Howard/Ferguson model in favour of Labor's policy commitments to address radioactive waste management issues in a manner which is "scientific, transparent, accountable, fair and allows access to appeal mechanisms".

Those still wedded to the Howard/Ferguson model have argued against a public inquiry on the grounds that spent fuel reprocessing waste has to be accepted into Australia by 2011. But the contract between ANSTO and COGEMA states the nuclear waste from the Lucas Heights nuclear reactor must be returned to Australia from reprocessing in France and Scotland, by the end of 2015.

The two main issues for a public inquiry are:

1. Waste production - application of waste minimisation principle, proper net-benefits analysis.
2. Thorough assessment of *all* options for the management of radioactive waste.

WASTE PRODUCTION

Before producing radioactive waste, it needs to be demonstrated that the benefits outweigh the risks. Unfortunately, waste minimisation principles are too often honoured in the breach. For example, the plan for a new reactor at Lucas Heights was not subject to thorough, independent analysis.

ANSTO is responsible for an overwhelming majority of the waste which would go to the proposed NT dump. By volume, spent fuel reprocessing waste accounts for only a small fraction of the total to be dumped in the NT, and conversely, the lightly contaminated soil now stored at Woomera accounts for about half the total. However these measurements should use radioactivity as the criterion wherever possible because radioactivity is a far more accurate measure of public health and environmental hazard. Measured by radioactivity, the spent fuel accounts for an overwhelming majority of the total radioactivity, certainly over 90% and possibly over 99%. Conversely, the radioactivity of the soil stored at Woomera is 0.3 GBq.

A win-win scenario is easily achievable by shutting down the OPAL reactor and investing instead on non-reactor technologies (e.g. accelerators for medical isotope production) and programs (e.g. 'suitcase science' - greater funding for Australian scientists to access overseas facilities). The benefits of this approach are that it promises broadly equivalent medical and scientific benefits (possibly greater benefits), a dramatic reduction in the generation of radioactive waste (including a complete cessation of spent nuclear fuel

production), and public support for the government's policies instead of the widespread opposition which now prevails. There are international precedents, such as the Belgian R&D program to replace the BR-2 research reactor with a spallation source, and the cancellation of a plan in the USA for a new, high-power research reactor in favour of a spallation source.

Nuclear medicine

As ever, specious scare-mongering in relation to the dump, the Lucas Heights reactor and nuclear medicine needs to be debunked. Australia does not even need a domestic reactor to secure medical isotope supply let alone a dump let alone a dump in the NT. Connecting the dump and/or the CRWMA to nuclear medicine is specious - if nuclear medicine was the criterion for selecting a dump site, which it isn't, the NT would be the last choice because it has fewer nuclear medicine procedures than any other state or territory (1% of the national total according to Nelson letter to Senator Scullion, 26/7/05, <www.senatorscullion.com>) and the NT also the fewest nuclear medicine procedures on a per capita basis.

Instead of reliance on a domestic reactor, the following strategy can be used for the supply of medical isotopes:

1. Greater reliance on imported radioisotopes;
2. Ongoing use of existing cyclotrons in Australia;
3. Further research into non-reactor radioisotope production technologies (esp. cyclotrons) with the aim of reducing demand for imported, reactor-produced radioisotopes; and
4. Ongoing and possibly greater use of alternative clinical modalities such as Magnetic Resonance Imaging, Computerised Tomography, and Ultrasound.

None of the four strategies alone will suffice, but combined, they are more than adequate. That point needs emphasis because proponents of a new reactor often jump from a critique of just one of the four proposed strategies to the false conclusion that a new reactor is required.

The above strategies are tried and tested, so there is no risk involved in closing the existing reactor without replacement.

* Over 250 cyclotrons are being used for medical isotope production in 34 countries (including three in Australia).

* Many countries - including Australia - routinely import isotopes.

* Alternative clinical modalities are well advanced - in fact nuclear medicine is the least frequently used of the diagnostic imaging modalities (99% of nuclear medicine is diagnostic; 1% is for therapy/palliation).

That the closure and non-replacement of the HIFAR reactor at Lucas Heights would have little or no impact on nuclear medicine has been confirmed during extended maintenance shut-downs of the HIFAR reactor. For example, there was no evidence of disruption to isotope supply during the February-May 2000 shut-down of HIFAR - a fact confirmed by ANSTO scientists. Isotopes usually produced at Lucas Heights were simply imported. In fact the President of the ANZ Association of Physicians in Nuclear Medicine was not even aware of the shut-down of HIFAR - and he certainly wasn't the only one.

The Labor government understands that there is little value in operating a domestic reactor in Australia, as the following excerpts from the 2001 Senate reactor inquiry, and a Labor media release, demonstrate:

The 2001 Senate committee report, endorsed by all Labor committee members, concluded that:

* "... no conclusive or compelling case has been established to support the proposed new reactor and ... the proposed new reactor should not proceed."

* "the decision to build a new reactor was taken without a detailed investigation of Australia's present and future scientific and medical needs".

* "The Committee is not convinced, however, that logistical difficulties constitute a serious obstacle to the successful importation of radioisotopes. It listened to the argument that there now exists an efficient and reliable global supply and distribution network that could supply Australia with most of its medical radioisotopes, including technetium-99m in the form of molybdenum generators."

* "... no conclusive or compelling case has been established to support the proposed new reactor and ... the proposed new reactor should not proceed."

Likewise, a November 4, 2001 media release by Jenny Macklin and the then shadow ministers for the environment and science stated that: "Australia will have a secure supply of medical isotopes for cancer treatment, medical research and other applications under Labor's policy of not building a nuclear reactor at Lucas Heights. John Howard is living in the past - the Lucas Heights reactor is not significant to Australia's security and it is not the only source of medical isotopes."

More information on medical isotope supply options:

* *Medical Association for Prevention of War, 'New Clear Direction: Securing Nuclear Medicine for the Next Generation',*

<www.mapw.org.au>

* *Articles posted at <www.geocities.com/jimgreen3/#isotopes>.*

WASTE MANAGEMENT OPTIONS

Much of the debate on waste management options assumes the 'need' for off-site stores or dumps. But the option of storing waste where it is produced needs serious consideration.

* Even if centralised facilities exist, waste is inevitably stored at the site of production, often for long periods. On-site storage facilities must be adequately constructed and regulated whether or not centralised, off-site waste management facilities exist. With adequate on-site storage facilities, the case for centralised facilities is weakened, especially considering the progressive decline of the radioactivity and toxicity of radioactive waste.

* Storage at the site of production avoids altogether the risks of transportation.

* It is by far the best (and perhaps the only) way to get radioactive waste producers to get serious about minimising waste production. Conversely, the provision of an out-of-sight-out-of-mind disposal option, as with the federal government's planned nuclear waste facility in the Northern Territory, is likely to lead to more profligate waste production.

* Organisations producing waste must have the expertise to manage it.

In the case of the Lucas Heights, it is difficult to see why ANSTO cannot continue to store its waste rather than the current push to dump it in the NT – albeit the case that improved waste management systems and greater transparency are required at ANSTO.

Australia's nuclear expertise is heavily concentrated at Lucas Heights. Conversely, there is little or no nuclear expertise in the vicinity of proposed nuclear dump sites in the NT. All of the key proponents of the proposed nuclear waste facility in the NT have acknowledged that ANSTO can continue to manage its own waste at Lucas Heights - ANSTO, the regulator ARPANSA, the federal bureaucracy, and even the Australian Nuclear Association. Moreover, ANSTO has increased its storage capacity as a contingency in the event that the NT dump plan is delayed or abandoned.

Dr Ron Cameron from ANSTO, at an ARPANSA forum in Adelaide on February 26, 2004, when asked by Prof. Lowe if ANSTO could continue to manage its own waste and what the implications of that would be: "Really, we believe there are none. ANSTO is capable of handling and storing wastes for long periods of time. There is no difficulty with that. I think we've been doing it for many years. We have the capability and technology to do so. We are prevented by a change that was made to the ANSTO Act at the response of Sutherland Shire Council from becoming a de facto repository. It's not allowed by the ANSTO Act. But we have the storage capability and the technical capability to store our own waste, certainly."

ANSTO spokesperson Andrew Humpherson said in September 2008 that: "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."

ARPANSA CEO John Loy has also noted that ANSTO can manage its own waste without dumping it on the NT: "I note that ANSTO's application is predicated on low level wastes finally being sent for disposal to the national low level waste (LLW) repository. ... 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." (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.)

The Department of Resources, Energy and Tourism (previously DOPIE, DEST, DIST, DISR etc) also acknowledges that ANSTO can store its own waste : "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." (DEST, Application to ARPANSA, Vol.iii Ch.9 Waste – Transfer and Documentation p.5.)

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

ANSTO's submission to this 2008 Senate inquiry marks a shift in its position. ANSTO submission not only acknowledges that ANSTO could continue to manage waste at Lucas Heights "for years to come", but it then emphasises the 'need' for a dump to centralise waste currently stored at about 30 other locations around Australia. ANSTO provides its version of the familiar scare-campaign about waste being scattered across Australia. Yet a Minchin/DEST document states that there have been *no* accidents of any significance at any of the current stores, and that claim has not been refuted by the Rudd Labor government.

The debate over the management of radioactive waste in Australia has been on in earnest for over a decade yet there are still significant gaps in our knowledge of the current status of waste stores around Australia. One more reason to initiate a thorough public inquiry.